

**Diapir Field Lease Offering
(Sale 87)**

Public Hearing

Barrow

1983

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PUBLIC HEARING

ON

DRAFT ENVIRONMENTAL IMPACT STATEMENT

FOR THE

DIAPIR FIELD LEASE OFFERING (JUNE 1984)

PANEL MEMBERS:

ROBERT BROCK	Regional Supervisor, Leasing & Environment Office, MMS
RAY EMERSON	Environmental Assessment Section, Leasing & Environment Office, MMS
ROD SMITH	Regional Supervisor, Field Operations Office, MMS
JOHN MORRISON	U.S. Fish and Wildlife Service

* * *

The panel met pursuant to notice at 7:30 p.m., October 24, 1983, at the Assembly Chambers, North Slope Borough Building, Barrow, Alaska, Mr. Robert Brock presiding.

* * *



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C E R T I F I C A T E

This is to certify that the attached proceedings before a panel convened to hear public testimony on the Draft Environmental Impact Statement for the Diapir Field Lease Offering (June 1984), taken at the Assembly Chambers, North Slope Borough Building, Barrow, Alaska, beginning at 7:30 p.m., October 24, 1983, were had as therein appears, and that this is the original transcript thereof.

Ellen J. Backey

Official Reporter

Transcribed October 31, 1983



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P R O C E E D I N G S

7:30 p.m.

MR. BROCK: Good evening ladies and gentlemen, the hearing will now start. I apologize for the delay, we were having a little problem trying to get the translating equipment and whatnot, so I do apologize for that delay. Welcome to this hearing. I'm Robert Brock from the Minerals Management Service in Anchorage, Alaska. I'm the Regional Supervisor for Leasing and Environment in the Alaska OCS Region. I have been designated to chair this hearing. The purpose of this hearing is to receive your comments and suggestions on the Draft Environmental Impact Statement for the Diapir Field Lease Offering scheduled for June, 1984. This document was prepared by the Minerals Management Service to fully evaluate the potential environmental effects of the oil and gas leasing activities associated with the lease offering. Further hearings will be conducted today in Barrow and Thursday in Anchorage on this Draft EIS. An official reporter, to make a verbatim transcript of the hearing, is seated on my far right. Everything that is spoken while the hearing is in session will be recorded. To assure a complete and accurate record of the hearing, it is necessary that only one person speak at a time and everyone else remain as quiet as possible. Copies of the transcript can be available through Akulaw Court Reporting. You



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1 can make arrangements with the court reporter today, or
2 contact Akulaw in Anchorage, not through the Minerals
3 Management Service, we do not have copies of the transcript.
4 This is not an adversary proceeding and no one will be
5 placed under oath; however, presentations should be relevant
6 and supported by pertinent data. Speakers will not be ques-
7 tioned unless a member of the hearing panel wishes to clari-
8 fy facts or to obtain additional information. The members
9 of the panel are not here to answer questions but to receive
10 information and not to exchange views. Panel members are
11 present to obtain as complete an understanding as possible
12 of all views of all interested parties. Speakers will be
13 called in the order they registered. If you have not
14 registered, please register with Laura Yoesting over here
15 in this corner. When you speak, please begin your remarks
16 with your name, address, and whom you represent, and please
17 spell your name. If you have prepared testimony, please
18 give one copy to the reporter for her assistance, but your
19 remarks will be recorded verbatim whether or not you have
20 prepared testimony. Any additional material you present to
21 us will be marked as an exhibit and entered into the record.
22 Each oral presentation should be limited to 10 minutes.
23 We will accept written comments from anybody not wishing to
24 testify, or in addition to what you've testified. Please
25 send those comments to the Minerals Management Service,



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1 Box 101159, that's 1-0-1-1-5-9, Anchorage, Alaska 99510.
2 The comment period for this Draft EIS closes November 10th.
3 Any information or comments received prior to that date will
4 be given the same consideration as any oral testimony given
5 here tonight. The panel members, besides myself tonight,
6 are, on my left, John Morrison from the U.S. Fish and Wild-
7 life Service in Anchorage; on my far right is Rod Smith,
8 Regional Supervisor for Field Operations from the Minerals
9 Management Service, and on my immediate right, Ray Emerson,
10 the Unit Chief for the Arctic Environmental Assessment
11 Section. The translator is James, and I don't know what
12 your last name is, James.

13 MR. NAGEAK: Nageak.

14 MR. BROCK: And he will be translating the translation
15 from Inupiat to English. We will not have time to trans-
16 late all of the testimony from English to Inupiat. Okay,
17 that concludes my remarks and the first speaker we have is
18 Jean Numnik.

19 (The above opening statement translated into Inupiat by Mr.
20 Nageak.)

21 STATEMENT OF JEAN NUMNIK, INDIVIDUAL, BARROW, ALASKA

22 MR. NUMNIK: (Statement of Mr. Numnik in Inupiat and
23 translated as follows by Mr. Nageak.)

24 MR. NAGEAK: A kind of synopsis of what he says is, I
25 want to thank you for coming -- he wants to thank you for



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1 coming here. The things that he talked about are that we
2 have a better understanding sometimes if we can see maps of
3 the areas being discussed here this evening. He knows that
4 when we just listen to words and we don't have anything to
5 point at, it makes it a little bit harder for a lot of us
6 to understand what is going on. His understanding is that
7 this oil development that's talked about here today, people
8 from the Lower 48 came up and started talking about there
9 will be some exploration in oilfields up here while they
10 were still young boys. And so it is from Kaktovik in the
11 east and Point Hope in the west we will have oil explor-
12 ation. And one of the things that he mentioned was that
13 the animals that we have, we get them when the ice conditions
14 are right and when the open water is right. And we get the
15 migratory animals, animals that migrate up this way when
16 the ice conditions are such that it is good for them to
17 travel. And he wants -- he knows it's pretty hard to speak
18 first and he was the first one to speak so it was pretty
19 hard for him to get the words out, but he knows that there
20 were people talking and sometimes when other people talk
21 then we will begin to exchange ideas or express ourselves
22 that way. So he wants to thank you for the opportunity.

23 MR. BROCK: Did we get an address for him?

24 MS. YOESTING: No, just Barrow.

25 MR. BROCK: Barrow, okay.



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1 MS. NOBLE: I do have a map of the lease sale area I
2 brought to put up so we could see the area we're talking
3 about. I think the maps distributed are small and kind of
4 hard to read.

5 MR. BROCK: That would be fine. Thank you, I normally
6 carry a map with me but I went off and forgot it. The
7 second testifier is Laurie Kingit.

8 MR. NAGEAK: How do you want to do this, let him go
9 all the way or do you want me to.....

10 MR. BROCK: If you want to summarize it, that's fine,
11 or if you want to stop in between, that might be a little
12 better in case any questions come up.

13 STATEMENT OF LAURIE KINGIT, INDIVIDUAL, POINT HOPE

14 MR. KINGIT: (Statement of Mr. Kingit in Inupiat and
15 translated as follows by Mr. Nageak.)

16 MR. NAGEAK: He wants to thank you for the opportunity
17 to speak. His name is Laurie Kingit, he was born in Point
18 Hope in 1909 and he has lived at Point Hope the 74 years
19 that he has been on this earth. The concern that he has in
20 the oil exploration that's happening at Prudhoe Bay and
21 other areas, exploration on land and sea -- he's concerned
22 especially about the offshore drilling, the effect that
23 would have -- that an oil spill would have on the animals
24 of the area, especially the birds. When he was a boy he --
25 I guess in the summertime some of the oil from the animals



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1 collects in an area and he has seen a bird landing in that
2 puddle of oil and has seen that the bird could not take off
3 and it finally died as an effect of the oil that was on it.
4 And he has seen a specimen of crude oil, he has taken a
5 piece of the crude oil in his hand and he knows that it
6 sticks to your fingers, not only a specimen from the Prudhoe
7 Bay area but a specimen from the Kenai oilfields down there.
8 And he knows that crude oil would have the same effect as
9 the oil that he has observed when he was a boy. From his
10 understanding, the muktuk of the whale has some area where
11 it's rough and there are areas where it's smooth, so
12 undoubtedly he's thinking that it probably would not stick on
13 there but in an area where it's rough, especially around
14 the blowhole, he knows that the oil would stick to those
15 areas. And so that's what he's really concerned about, that
16 the animals that we have, seals, polar bears -- his idea,
17 you know, that animals will be effected through an oil
18 spill. This is his understanding through his life.
19 Another concern of his is he has seen rigs, and the rigs
20 have posts or anchors that they put down into the ground,
21 and if they do the same thing in the ocean, he knows the ice
22 conditions, he has seen ice move and he has seen ice pile
23 up, ice that is four feet thick, you know, he has seen just
24 piling up, just keep piling up, and if it piles up where
25 it's anchored, that's one of his concerns -- that is, if



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1 you have a platform out there on the ocean the effect of
2 the piling up of the ice would eventually lift the platform,
3 lift it off the anchorage. So that's a possibility that is
4 a concern of his.

5 He wants to -- he said it's always good to speak your
6 mind, and he's talking to the people here, and he wants to
7 thank you and also if both sides understood each other it
8 would help the process and there would be better under-
9 standing of what is going on; you tell them what's going on
10 and they tell you what's on their minds, that way we can
11 help each other to understand the situation.

12 MR. KINGIT: Thank you.

13 MR. BROCK: Thank you, sir. Our next speaker is Sam
14 Taalak, Mayor of Nuiqsut.

15 STATEMENT OF SAM TAALAK, MAYOR, NUIQSUT, ALASKA

16 MR. TAALAK: I will be very, very brief, if I can.
17 First I would like to admire Ms. Noble managed to condense
18 your book to about eight pages. That kind of language we
19 can understand. I would like to insert into the record of
20 the hearing, Ms. Noble's condensation. There is only one
21 avenue that I would like to speak of at this moment. I
22 would like to insert into the record a September 1983 publi-
23 cation of Arctic Policy Review. We got a question asked by
24 a lot of people reading this article. It's a question of
25 can an oil spill be controlled in the Arctic? I don't know



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1 whether you're aware of that publication or not but it tells
2 very, very briefly what the oil industry can do in control-
3 ling an oil spill of a small scale in an area as wide as
4 100 yards square. Now, if they cannot even control an area,
5 what can they do with the entire Beaufort Sea. In nature
6 ice moves by the mighty hand of God. You have no way of
7 controlling it, you are pitting yourself -- you taught me
8 how to be a Christian and here you are, in an oil-glut
9 world, you tell me you're going to conquer nature itself.
10 Now, I want to get down to the basic facts about your report
11 that says that the type of ice equipment you want to
12 employ in the Beaufort Sea, as compared to the Canadian
13 side which is a no-movement world -- you are talking about
14 ice movement, evil, the evil power of ice; ice movement,
15 you have never seen it and until you have seen it you won't
16 believe it. A super tanker, nuclear tanker, could not even
17 move through three feet of ice. We had one sitting here and
18 it got to be a laughingstock, the pride of the United States
19 of America. One of the biggest nuclear ice breakers they
20 had created. Now, that's the type of equipment that you
21 want to use to fight nature and to get the oil out of the
22 Beaufort Sea. I cannot even begin to declare to you people
23 that the systems you have come up with, the theories you
24 have come up with, look pretty good on paper, but you pit
25 yourself against the Almighty and you haven't got a chance



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1 in the world, in this ice world we got up here. We know
2 how to respect it because we lived in it for 5,000 - 10,000
3 years. You haven't! Yet you are going to proceed to con-
4 quer something that God has made. But until you can come
5 up with single super tanker that will control all the ice,
6 I think that you should have Alternative No. III, or no
7 sale until you can correct -- until you can clearly state
8 you have conquered nature itself. Thank you.

9 MR. BROCK: Thank you, sir.

10 MR. TAALAK: I will be back.

11 MR. BROCK: Heather Noble.

12 STATEMENT OF HEATHER NOBLE, INDIVIDUAL, BARROW, ALASKA

13 MS. NOBLE: I will be submitting written comments after
14 the hearing and before the November 10th deadline. Basic-
15 ally tonight I just want to testify for the benefit of some
16 of the people in the audience here tonight who haven't been
17 filled in about a lot of the details of the sale. And I've
18 asked Mr. Nageak to translate into Inupiat.

19 MR. BROCK: Are you representing yourself?

20 MS. NOBLE: Right now I'm basically informing the public
21 about what is happening with this sale. We're talking
22 tonight about a Draft Environmental Impact Statement that
23 is supposed to provide enough information so that someone
24 from the Department of Interior can decide whether to hold
25 the sale and how to hold the sale. And because the Draft



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1 Environmental Impact Statement is going to be used that way
2 it's important that it is complete and that it is accurate.
3 It's important that the Draft Environmental Impact Statement
4 tell the people of the Department of Interior what is going
5 to happen if this lease sale goes through. One thing that
6 the DEIS does is that it talks about alternatives. Dif-
7 ferent ways of holding the sale. And two of the alterna-
8 tives that it talks about is to not lease two big areas, the
9 two big areas there in the red up on the map on the wall.
10 So in the Draft Environmental Impact Statement people are
11 considering that they might want to not lease those two
12 areas. One of those areas is near Barrow and one of those
13 areas is near Kaktovik. And people here tonight can talk
14 about how they feel about those alternatives. People have
15 already talked about the oil spills tonight, the Draft EIS
16 talks about ice and how ice movement might cause oil spills.
17 The Draft Environmental Impact Statement estimates that
18 there will be seven oil spills from this lease sale. The
19 Draft EIS also talks about what would happen to that oil
20 after it is spilled. It says that oil that is spilled in
21 the wintertime will be frozen into the ice and can't be
22 cleaned up until springtime; the oil companies can't clean
23 it up until springtime. And the Draft EIS talks about
24 where the oil would go at breakup, when the ice starts
25 breaking up. And one place that it might go is into the



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1 | lead where the whales are migrating. The Draft EIS estimates
2 | that there is a 50% chance that oil will get in the lead
3 | while the whales are migrating. Now, let me explain what
4 | a 50% chance is; 50% chance means that it's just as likely
5 | that it will get there while the whales are migrating as
6 | that it won't get there. The Draft EIS talks about what
7 | will happen to whales if they swim into an area where
8 | there's an oil spill. They don't think the whales will be
9 | hurt too much by the oil. They think that although whale
10 | skins are sensitive, that they wouldn't be hurt for very
11 | long. They say that although the whales might get oil in
12 | their baleen that the baleen would get cleaned pretty
13 | quickly. They don't think that whales would be hurt by
14 | swallowing oil. Other animals would also be hurt by the
15 | oil. Seals would be hurt because they would get it on their
16 | fur and might die of cold. But an oil spill would only be
17 | on one part of the coast and seals are all over so not all
18 | of the seals would be killed. Oil spills would also kill
19 | fish. But the fish are all over, just like the seals.
20 | Laurie already talked about how oil can kill birds. And
21 | the Draft EIS admits that oil would kill a lot of birds.
22 | But the DEIS says the birds are all over the place and the
23 | oil would only be in one area. And so not all the birds on
24 | the North Slope would be killed. If there were oil develop-
25 | ment in this area there would also be a lot of noise and



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1 traffic and drilling and helicopters and boats and all sorts
2 of things going on. All this activity would disturb the
3 animals. The Draft Environmental Impact Statement says
4 that they're not sure whether whales would be hurt by the
5 noise.

6 (The above comments by Ms. Noble were translated sentence by
7 sentence into Inupiat by Mr. Nageak.)

8 MR. BROCK: Are you going to be finished in a few
9 minutes? You have gone over your 10 minutes.

10 MS. NOBLE: In a little while.

11 MR. BROCK: Try to keep it to a few more minutes,
12 please.

13 MS. NOBLE: They don't know if whales are affected by
14 noise. Seals and birds are both disturbed by noise. But
15 they don't think that there will be a lot fewer seals or
16 birds because of the noise and the activity. They passed
17 out maps showing where they think the pipelines might go
18 to get the oil out of this lease sale land. And the pipe-
19 lines might affect the caribou if the caribou didn't want
20 to cross the pipelines. One of the pipelines might go over
21 towards Kaktovik into the area where the Porcupine caribou
22 herd is. And there might be a pipeline along the coast
23 from Prudhoe Bay over to Point Barrow. And another pipe-
24 line might go across the NPRA south of Barrow and south
25 of Nuiqsut. And that pipeline might affect the Western



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1 Arctic caribou herd. The Draft EIS also talks about sub-
2 sistence. And the Draft Environmental Impact Statement
3 admits that any changes to whaling would be a major impact
4 on people's subsistence.

5 (The above comments by Ms. Noble translated sentence by
6 sentence into Inupiat by Mr. Nageak.)

7 MR. BROCK: Excuse me, I'm afraid that to be fair to
8 everybody we're going to have to stop this and we'll be
9 glad to pick you up at the end and continue.....

10 MS. NOBLE: Well, it isn't going to do anybody.....

11 MR. BROCK: We're trying to hold our time to 10 minutes
12 for everybody, and the people on the radio said that if we
13 would take about a five-minute break they thought they
14 could have us back on the air. So let's take a five-minute
15 break and meet back and we'll pick up with the next speaker,
16 and we'd like to have you come back again. Thank you.

17 (Off record.)

18 MR. BROCK: Let's resume the hearing. And I would like
19 to emphasize again that we'd like to have you hold your
20 testimony to 10 minutes. And to make sure, since this is
21 your hearing and a chance to express your views on this
22 DEIS -- to make sure that everybody has that time to do it,
23 we won't be able to translate it from English back into
24 Inupiat, because the idea of the hearing is to make sure
25 that you get your views across to the reporter and the panel.



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1 And we want to make sure that that takes place tonight. So
2 we do want to limit the translating into English. James,
3 do you want to translate? Our translator's asleep.

4 MR. NAGEAK: No, I just took you at your word.

5 MR. BROCK: I'm sorry about that.

6 (Mr. Brock's comments translated into Inupiat by Mr. Nageak)

7 MR. BROCK: The next person is Percy -- and I'm not
8 going to try your last name, Percy, I can never remember
9 how to pronounce it.

10 STATEMENT OF PERCY NUSUNGINYA

11 ALASKA ESKIMO WHALING COMMISSION

12 MR. NUSUNGINYA: Gentlemen, to summarize what the first
13 two elderly gentlemen have spoken in Inupiat and did not
14 have paper backup and I do, and what they have more or less
15 said I will put this. First of all, my name is Percy
16 Nusunginya, I am with the Alaska Eskimo Whaling Commission
17 and here is my statement. Industrial cleanup efficiency
18 has not improved since January 28, 1977 in Buzzards Bay,
19 Massachusetts. Oil spill which is only 20,000 gallons
20 recovered from 81,000 gallons spill. Now, this is in
21 Massachusetts, not in the Arctic. This summer there was
22 supposed to be a demonstration on oil spill response but
23 the weather did not cooperate in the Arctic, so we will
24 expect the industry to have an oil spill on a calm day.
25 The cleanup on an oil spill in Buzzards Bay was from nil to



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1 24% effective cleanup in mild weather. Here in the Arctic,
2 oil spill will be next to impossible to clean up, as proven
3 by the oil company in their failure to do a demonstration
4 oil spill cleanup. Quote: "The loss of a communication
5 channel and the loudness of the ship noises might well
6 result in the dispersion of normally herding marine mammals
7 and may interfere with normal reproduction". That was from
8 page 275 of The Question of Sound from Icebreaker Opera-
9 tions", the proceedings of a workshop of February 23 - 24,
10 1981, Toronto, Ontario. Arctic pilot project was stopped
11 because the noise pollution was the most imminent danger
12 along with the oil spill. We have told the government and
13 the oil industry over and over that the Diapir Field is the
14 critical habitat of the bowhead whale and other marine
15 mammals. If the bowhead is really in a critical endangered
16 species list, then I would be willing to stop hunting the
17 animal if the oil industry will stop their offshore oil
18 activities. The United States has no jurisdiction and no
19 claim in the Arctic. This is based on the United States
20 versus Mario Escamilla, the ice island case, and again, from
21 the Congressional Records, 197th Congress, 2nd Session,
22 December 9, 1982, and from the law of the sea of the Arctic.
23 So this lease sale should be at least deleted or delayed.
24 And we know that the Federal Government will lose billions
25 and billions when the Inupiat know that the Diapir Field



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1 is larger than the North Sea fields. As the Commission
2 member of the Alaska Eskimo Whaling Commission, I feel this
3 should help your staff in making it clear that this lease
4 sale is a direct threat to the well-being of the Inupiat
5 and the animals of the Arctic. Thank you.

6 MR. BROCK: Thank you, sir. The next speaker is Ray
7 Dronenburg.

8 STATEMENT OF RAY DRONENBURG

9 ENVIRONMENTAL PROTECTION DEPARTMENT, NORTH SLOPE BOROUGH

10 MR. DRONENBURG: My name is Ray Dronenburg, and I'm
11 with the Environmental Protection Department of the North
12 Slope Borough. I have lived here in Barrow since 1978 --
13 and you want my address, Post Office Box 69, Barrow. From
14 1978 until 1980 I was Director for Marine Operations for the
15 Naval Arctic Research Laboratory and as such had occasion
16 to direct offshore OCS research in the Beaufort Sea and
17 partially in the Chukchi Sea. During that time it was my
18 experience to determine that the Beaufort Sea was a very un-
19 forgiving ocean and the Chukchi Sea was completely something
20 else. Having read this book I can't help but wonder how
21 people can -- and I'm sorry, I forgot my glasses -- but I
22 can't help but wonder how people could write something that
23 says although some bowhead whales are likely to contact oil
24 on the surface or in the water column if an oil spill occurs,
25 the entire population, or a major portion of it, is unlikely



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1 to be exposed. This animal, as far as I can determine, is
2 still an endangered species animal, and it seems to me that
3 if there is any possibility that this animal might in any
4 way become exposed to oil, then we owe it the greatest
5 regard. And therefore it seems to me that to lease an area
6 that this whale inhabits a considerable amount of the year
7 doesn't really make much sense at this time. I'd like to
8 point out that probably the biggest concern that should be
9 faced with this lease sale is the people of the North Slope.
10 The people of the North Slope depend on the Beaufort Sea
11 and the Chukchi Sea for subsistence products to a very large
12 extent. They depend on the bowhead whale, on the seal, on
13 the fish, on the polar bear, and on the fox -- everything
14 that comes from the sea. And here we've discussed turning
15 that sea over to oil and gas development. I have testified
16 at previous EIS get-togethers that as many as 3,000 small,
17 incidental oil spills occur annually with onshore normal
18 oil and gas development. We can expect that as development
19 occurs offshore that these 3,000 incidental spills will move
20 offshore with that development. I read in here that some
21 37,000 pounds of drill mud cuttings are to be disposed of
22 at sea. And in total, I really have a grave concern for the
23 Beaufort Sea as a repository for all of this debris that
24 might be associated with offshore development. Additionally,
25 I am concerned with the dredging of some 13 or 15 platforms



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1 with which to drill wells in that the dredging for this
2 gravel, which represents probably a million cubic yards of
3 gravel per island, is going to make an horrendous amount of
4 noise in an area that's very sensitive to noise. Addition-
5 ally, in relationship to oil exploration, we're looking at
6 seismic boats booming their way up and down the Beaufort
7 Sea. Looking at this map on the wall here, and especially
8 the two gray areas, we're looking at areas from Kaktovik to
9 the Canadian Border that are very strongly suspected as
10 critical habitat areas for the bowhead whale as regards
11 their feeding habits. We're looking at -- your gray area
12 probably doesn't go far enough west that it doesn't include
13 Camden Bay, where there is also a very strong indication
14 that there is a very critical feeding area for bowhead
15 whales. Looking to the west we do see that the deletion
16 does include the Plover Islands Chain where there have been
17 three or four papers written by National Fisheries Service
18 and various other agencies indicating that there's probably
19 a strong feeding trend in that area also for the endangered
20 species animal. Having been privy to several meetings of
21 Beaufort Sea Biological Task Force, et cetera, it seems to
22 me that all indications are that the Beaufort Sea, especi-
23 ally from the Canadian Border to Point Barrow is pretty darn
24 important to the bowhead whale. It just doesn't seem logi-
25 cal to me that at this time, with the small amount of



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1 research that's been done in that area, we would want to
2 give up the ship and turn it over to the oil companies.
3 There's a lot more that needs to be done there. I kind of
4 steered away from the Chukchi Sea because I don't know --
5 very, very little research has been done on the Chukchi Sea
6 from Point Barrow on down past the edge of the lease sale
7 area. Now, the Chukchi Sea I regard as highly dangerous,
8 with ice, ice movement, et cetera. It only would take --
9 we do the whale census in the spring and it would only take
10 you one overflight of that area during the spring breakup
11 time, and looking at the mulching action of that ice out
12 there you'd think to yourself there's not going to be much
13 that would survive out there in the way of a drill ship or
14 an island or whatever platform the oil companies intend to
15 use. It is my intention to write my testimony and to pre-
16 sent it to you in written form. I do not have that done at
17 this time so I just think I will let it rest there. Thank
18 you.

19 MR. BROCK: Thank you. Tom Albert.

20 STATEMENT OF THOMAS ALBERT

21 ENVIRONMENTAL PROTECTION OFFICE, NORTH SLOPE BOROUGH, BARROW

22 DR. ALBERT: Well thank you, my name is Tom Albert, I
23 work for the Environmental Protection Office of the North
24 Slope Borough. And as I mentioned to you earlier, if you
25 don't mind I'd just like to show a couple of slides to



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1 illustrate some of the things that I want to mention, and I
2 have a couple of items just to pass around. What I'm going
3 to do is confine my comments pretty much to the effect of
4 oil on bowhead whales. And the sections in the document
5 where this is covered is extraordinarily brief and, in my
6 view, borders on incompetence. I'm just really surprised.
7 One of the things that's alluded to in one instance here is
8 that oil may stick to bowhead whale skin, and a few pages
9 earlier there's some reference to oil not sticking to the
10 smooth skin cetaceans, although there's no reference to,
11 let's say, explaining these two comments. I think what's
12 going on is probably a basic misunderstanding by whomever
13 prepared this section of what's going on with certain
14 cetaceans. There are three cetaceans that I'm aware of that
15 do not have smooth skin, one of them is the right whale and it
16 has rostral (indiscernible) that people are well aware of.
17 Another is the gray whale which has many barnacles over its
18 surface. And a third, which is maybe not so well known, is
19 the bowhead whale, and I think it's reasonable to speculate
20 that a substance such as oil will tend to adhere to surfaces
21 that have microrelief attached to them. And the example
22 that I would use to you, and I'll come back to it again,
23 and it has happened probably to most of us, is in eating a
24 dinner, and it usually happens at a nice restaurant, the
25 better dressed you are the more likely it is to occur,



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1 whereby you spill a little bit of gravy or salad oil on
2 either the best tablecloth, or on your tie, or maybe on your
3 wife's dress, whatever -- nevertheless, we all know that
4 this material just does not blot up very nicely with a nap-
5 kin, it stains; whereas the same quantity of gravy or vege-
6 table oil or whatever, if dropped on the table surface, the
7 smooth surface of the table, such as the table in front of
8 you, can be easily wiped up with a napkin, leaving almost
9 no residual. I don't think it stretches anyone's imagination
10 to understand what's going on. The microrelief provided by
11 the rough surface, be it the nap of the rug under your feet
12 right now or the table -- or, let's say clothing -- provides
13 a surface for the oil to adhere to, whereas a very smooth
14 table surface does not. (Slide) There's a bowhead whale
15 captured by Harry Brower in the Spring of 1980, and if you
16 look at the skin again it appears to be almost glass like
17 in smoothness and has helped to perpetuate this idea that
18 maybe the oil will not stick to these animals. On the right-
19 hand side a little bit toward Dr. Emerson you begin to see
20 some areas of roughness. If you look at them a little more
21 closely you'll see several dozen rough irregular areas on
22 this animal's surface. Of all the animals that I have
23 examined, some 13 animals up very close now, they all have
24 these and they vary from hundreds to many hundreds over the
25 animal's surface. If you look at them a little bit closer



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1 you can see that indeed there is a roughened area here.
2 That little yellow thing in the middle is a louse that's
3 something on the order of a half-inch in diameter, to give
4 you some idea of scale, he was hiding in one of these areas.
5 These lesion-like -- these lesions are eroded areas. If
6 you look at them closely, they do have a microrelief, some-
7 thing on the order of a millimeter or so. They are maybe
8 two millimeters deep and something on the order of two or
9 three centimeters, sometimes up to six inches in diameter.
10 So, anyone that thinks the skin of a bowhead whale is as
11 smooth as a tabletop is just displaying their own ignorance.
12 I'm afraid that ignorance is well displayed in this section
13 here on oil effects on the bowhead whale. (Slide) To go
14 on a little further, here's a little closer up view. The
15 lesion there in the lower left central area there that
16 looks a little fuzzy is something on the order of an inch
17 and a half in diameter. This, by the way, is a whale that
18 was captured -- the one previous to that was a whale caught
19 in the spring of 1979 by Burton Rexford (ph) who's here in
20 the audience. This is a whale that was caught by Joe
21 Kaliak (ph) in 1979 in Kaktovik and the baleen is visible
22 in the upper area there. It is a closeup of some of these
23 lesions on the head of the animal. The head seems to be
24 particularly well endowed with these roughened areas. Some
25 people think it's sloughing skin, which is just off-the-wall,



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1 it has nothing to do with it. We do not know the exact
2 cause of these things, the best guess that we have at the
3 moment is it's some sort of virus, although we haven't been
4 able to isolate it. So the contention is that here you have
5 an animal that is not as smooth as glass but is covered by
6 hundreds and hundreds of these eroded areas of skin, very
7 common on the head. And the head, of course, is the area
8 that comes out of the water during surfacing. Anyone who
9 feels that oil will not stick to these things at all I'm
10 afraid is just making a -- I don't think it's realistic.
11 We're speculating as to what's going on here. I think it's
12 quite reasonable to speculate that oil will stick to a
13 roughened surface. Now, one of the reasons maybe for making
14 so much out of this is that if you look with a light micro-
15 scope or a scanning electron microscope of the normal skin
16 of a bowhead you'll find out that it's not only very smooth
17 and there's almost no bacteria on the surface. Yours and
18 my skin is loaded with bacteria. Their skin on the surface,
19 the smooth areas, there's not much bacteria. As soon as you
20 get into one of those eroded areas there are millions, in
21 fact billions, of microorganisms. The problem is that if
22 you look down in these lesions also you find that the skin
23 has been eroded away and it's very close to the very small
24 blood vessels, the capillaries of the skin. The bacteria
25 thereby are very close to the blood vessels. If oil were to



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1 | pass by those areas and stick -- and I would certainly like
2 | for someone to give me a good reason why it would not stick
3 | -- it may further irritate already damaged area and allow
4 | the beginning of an ulcer. As anyone who has any medical
5 | training knows, if you begin to damage the skin to the
6 | point of ulceration, you begin to allow bacteria an avenue
7 | into the bloodstream. So, in the Environmental Impact
8 | Statement there's no mention -- there's only one brief
9 | mention of this and that's dismissed as unfounded specu-
10 | lation, or something of that nature.

11 | Now, as I'm sure you folks are aware, the Bureau of
12 | Land Management paid myself and several other folks to con-
13 | duct a study on the basic biology of a bowhead, including
14 | structure of the skin and things like that, which we did do
15 | and which is mentioned in your document here briefly. When
16 | we were finished with our microbiological and whatever gross
17 | anatomical study we did for BLM, I took the information as
18 | best I could and summarized it in a view that I thought
19 | would make some sense as to how this animal may be damaged
20 | if it encounters oil, based on what we know about its struc-
21 | ture now. And that is the concluding chapter in this report,
22 | as I'm sure some of you folks may have looked at. That is
23 | not even mentioned in this Environmental Impact Statement.
24 | Now, this document, the final speculative section, was
25 | reviewed by all the people that participated in this study.



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1 There were 30 scientists who participated in this study,
2 30 of them; there were 20 veterinarians and two physicians,
3 and a zoologist. They all reviewed this speculative section
4 that I put at the end entitled, Some Thoughts on the Effects
5 on Bowhead Whales - Spilled Oil. None of them found any-
6 thing irrational or overly wild or anything like that. And
7 I didn't think they really would because people who are
8 trained in disease can see these as quite rational specu-
9 lations. To come to eventually the intestinal obstruction
10 thing maybe may not make sense to many folks, but to those
11 trained in medical or veterinary practice these do make
12 sense. Two of the people on this study are certified path-
13 ologists, one's a physician and one's a veterinarian.
14 These people are well capable of passing, let's say, on
15 whether or not this is too speculative. I would urge you
16 when you get into the effects, estimating the effects on
17 animals, that you get on your review panel appropriate --
18 on your evaluation -- appropriate people, appropriate exper-
19 tise. And this should include board certified pathologists,
20 or clinicians with experience with large animals. I didn't
21 see any of that.

22 Let's go on here a little bit. (Slide) This is the
23 blowhole area and there are some roughened areas also.
24 These occur all over the head. Any bowhead whale that's
25 going to surface in an oil slick is going to get a lot of



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1 oil on it. (Slide) The baleen of these animals is charac-
2 terized by very long fibers. These are very dense fibers,
3 and one might ask why dwell on something like this? These
4 baleen fibers, hair-like fibers, which are something on the
5 order of 8 to 10 inches, sometimes even longer, break off
6 as the animal feeds. And every stomach I've look in has
7 some in there. This particular group of knotted up baleen
8 hair were collected by Fred George from an animal caught in
9 Kaktovik, I think last year. One may say why worry with
10 something like this. (Slide) This is an open stomach from
11 about a 28-foot bowhead whale after it's been in (indiscern-
12 ible) for awhile and it may not be all that exciting to most
13 of us, let's say. The real important thing is if you look
14 on the left that little sort of greenish area that has that
15 cord running through it from below upwards -- that cord dis-
16 appears into a hole and then emerges out the top. That hole
17 is the third compartment of their stomach; you know, it's
18 a four-chamber stomach much like cattle. The third chamber
19 is a tube approximately one and a half inches in diameter
20 and something on the order of a foot long. It doesn't
21 matter what this animal eats, or how big the animal is, if
22 it's 50-ton in size, or whatever it is, every drop of food
23 that it eats has got to go through that little hole. Why it's
24 there I don't know, but that's it. Any veterinarian or any
25 physician who would look at something like this would say,



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1 man, sooner or later you're going to have an obstruction
2 here if you put circumstances in the right frame. That is,
3 you've got to have the makings for an obstruction. And the
4 ideal makings for an obstruction are a filamentous material
5 in the food and a sticky substance. Many cat owners and
6 dog owners learn this to their dismay, the common hair balls.
7 Well, what I'm trying to say is that I think the stage is
8 set for absolute disaster on bowhead whales if they en-
9 counter oil. I think the people who have prepared this
10 section in this book have done a disservice. It, I would
11 say, borders on incompetence. And I will argue that with
12 anyone. The effects of ingestion of oil are passed off in
13 a single little paragraph. And all they do is reflect the
14 inability to grasp what's going on by the preparers, I
15 think. Now, let me go through this one first. Here's the
16 baleen fibers that break off, they're in every bowhead's
17 stomach. If you put them down in an animal's stomach and
18 put a sticky substance in there such as oil, it's got to
19 happen. It may not happen today, tomorrow, or next week,
20 but it's going to happen. Sooner or later those hairs in
21 there will mat together in sufficient quantity and bind up
22 with them these little shrimp-like critters that the animal
23 eats and make an obstruction, or at least a hair ball-like
24 thing. But if the animal had a three or four inch diameter
25 GI tract continuously, maybe it would never be a problem.



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1 But God, for some reason, has put, right in the beginning
2 almost, an inch and a half diameter tube. Yes, Ray?

3 MR. EMERSON: Tom, they seem to be knotted already,
4 is that right?

5 DR. ALBERT: Right, that is the only instance that we
6 found like that, and Craig found those. And the purpose of
7 showing them is not necessarily to say that this occurs in
8 every whale. This is what they're going to look like after
9 they're twisted up together in a sticky substance. But
10 those hairs are quite long, as you can see, and the poten-
11 tial for them getting balled up with something like oil is
12 just wonderful. So I don't think if a bowhead whale swims
13 into an oil slick it's going to die immediately. It's not
14 going to happen, he's going to swim over the horizon and
15 then the problems are going to happen. The next day is he
16 going to get ulcers on his skin, bacteria going into the
17 bloodstream, or God forbid, this thing. I showed you a
18 little while ago -- here's one of these skin lesions. If
19 you don't think that's rough, then there's no hope. I
20 mean, there are lots of these things on these animals. A
21 bowhead whale's skin is not smooth. A lot of it is. These
22 things, don't get me wrong now, are probably as much a
23 problem to the bowhead whale as the moles and occasional
24 wart and stuff that you and I have, usually in profusion.
25 They don't bother us, and I don't think this, whatever it



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1 is, bothers this animal. But the seeds for destruction are
2 there. There are loads of bacteria in there and they are
3 very closely eroded, almost down to the blood vessels, and
4 if you put something else on there that could irritate this
5 a little bit further, I think you're in for trouble. And
6 it's not in here.

7 MR. BROCK: John has a question. Go ahead, John.

8 MR. MORRISON: I've got a couple of questions. First,
9 have you identified the bacteria that inhabit these lesions,
10 and particularly the ones that might be pathological if
11 they got in the bloodstream?

12 DR. ALBERT: Yes and no. Okay, we've identified --
13 beginning with this Bureau of Land Management funded study
14 we started identifying bacteria. We had a lot of problems
15 with contamination of samples. Anybody who has collected
16 material from out on the ice and held it unrefrigerated and
17 then frozen and then unrefrigerated and then frozen and so
18 on, by the time it gets to God knows where you have prob-
19 lems, logistical problems. So we found probably some 20
20 bacteria so far but none of them to this date are known
21 pathogens. A few of them are capable of causing disease.
22 That is, are opportunistic type organisms, the kind of
23 organisms you and I have on our skin and in our respiratory
24 tract, and under the proper circumstance when we are
25 weakened will cause disease. But they are not virulent



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1 organisms on their own. We are continuing these particular
2 microbiological studies and hope that we now have in hand
3 at the University of George proper samples to delineate
4 this. We have every reason to suspect that the bowhead
5 whale skin will be populated by pathogens, just like your
6 skin is and my skin is, horse skin, pig skin, everybody's
7 skin.

8 MR. MORRISON: For the benefit of the record, it would
9 help too to go back into history and explore any ideas or
10 observations that the oldtime whalers might have had about
11 these lesions. Have they always been on bowheads, or are
12 they something that have developed in recent years perhaps
13 from contact with something encountered somewhere in their
14 migration?

15 DR. ALBERT: Apparently they've been there. People
16 tell me they've seen these for a long time but they never
17 worried about them, it doesn't, apparently, kill the whale.
18 They're usually limited to the outer two or three millimeters
19 of the skin. The skin is a centimeter thick, or two centi-
20 meters thick, so it's, let's say, not in itself a life-
21 threatening thing, no more than to you and I with certain
22 abrasions and things that we have on us. Old photographs
23 I've looked at, if you look at them carefully enough,
24 especially on the head, they're always there. So they're
25 there. They were reported in a NARL study and they were



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1 reported in here, but they're passed off as unfounded
2 speculation or something. Well, it's quite reasonable
3 speculation for anybody who has any medical training. For
4 people who don't have the necessary background, yes, maybe
5 it is a speculation too far out.

6 MR. BROCK: Ray, do you have a question?

7 MR. EMERSON: Well, this isn't so much a question.
8 Sometimes the sections, like say for example on whales --
9 and this isn't an excuse, believe it or not, this is not an
10 excuse for what has been omitted -- it's just that a more
11 recent EIS like this one, the section will probably be
12 shorter due to the fact that we are referencing back, let's
13 say in this case, to the Sale 71 material. So a lot of
14 the descriptive material is the same, the same basic data,
15 we will not -- we try to build with the more recent stuff.

16 DR. ALBERT: But nevertheless, Ray, it's not in the
17 earlier ones either. It's just reported that the oil
18 effects are limited to the work that Dr. Geraci did, which
19 is very nice work, it was done with smooth-skin cetaceans
20 for very short periods of time -- very short periods of
21 time, 17 hours, 17 minutes, one hour, whatever it was;
22 these are very short times. I think if you put oil on
23 something like that, you're going to find that it's going
24 to stay down in the microrelief, just like down in the nap
25 of your tie or the nap of this rug, it will stay for a long



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1 time. The bacteria stay there, they don't get washed off.
2 The ones that are out on the smooth skin get washed off.
3 I suspect the oil would get washed off of there also, but
4 not down in these recesses. And there are a lot of them on
5 this sample. So I think you're really playing with some-
6 thing very dangerous here, and that is you have two extra-
7 ordinarily well designed mechanisms for doing grievous harm
8 to these animals. For some reason it's there. You have
9 eroded areas almost down to the blood vessels and loaded
10 with bacteria. You have the anatomical arrangement for a
11 gastric obstruction, and you have this filamentous material
12 that nature puts in there every day. Hair breaks off in the
13 animal's mouth all the time. The baleen studies that are
14 reported in here -- the baleen fouling study that was done
15 by Dr. Geraci, just to go on for a few more minutes, is a
16 very fine study except it was not done on bowhead whale
17 baleen, it was done on baleen with very short fibers, and it
18 did not measure filtering efficiency. It's incorrectly
19 stated in here as measuring filter efficiency, but he didn't.
20 He measured water flow. I don't know of anyone who feels
21 that water flow through baleen is going to be stopped by oil
22 fouling. I don't know of anybody who says that. So he does
23 a good study, he's a good man, which confirms something
24 that I think most people say is a non-issue. On the other
25 hand, you have a study done by Braithwaite on bowhead



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1 baleen, which is given short shrift in here, one paragraph
2 or half a paragraph, which clearly shows that this long-
3 haired baleen will become matted with oil. And he did not
4 bother measuring whether water would pass through it or not.
5 That's not the problem, the problem is, is it going to
6 affect filtering efficiency? The efficiency of extracting
7 the critters, that's what he measured. And sure enough it
8 does. Not as much as I thought it was going to do it, but
9 it does.

10 MR. BROCK: Thank you, Tom.

11 DR. ALBERT: Thank you.

12 MR. BROCK: The next person registered is Leroy Oenga.

13 STATEMENT OF LEROY OENGA, INDIVIDUAL, BARROW, ALASKA

14 MR. OENGA: First of all I would like to state that I
15 started work with the Environmental Protection Office here
16 in Barrow this year. And my feelings in the past and now
17 are that we have an offshore subsistence lifestyle here in
18 the Arctic Slope. We have lived here for thousands of years
19 and yet we speak and yet still you want to go offshore. We
20 were here first but I guess Government, in our land, wants
21 to drill even when we object. I have worked in the past at
22 NPRA, making drilling pads, airstrips, and roads. People
23 I worked with think we're just like the native Indians down
24 south, but we aren't. Here we are with strong cultures,
25 still going strong; our main goal is a subsistence lifestyle



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1 and, best of all, our culture for our young generation.
2 This would result in our environment being impacted by noise
3 and activity around that drill area, especially the whale
4 migrating route that lies in these boundaries. So I oppose
5 this lease sale. Thank you.

6 MR. BROCK: Thank you, sir. Harold Curran.

7 STATEMENT OF HAROLD CURRAN, ATTORNEY
8 NORTH SLOPE BOROUGH

9 MR. CURRAN: My grandfather says Curran, so I think
10 that's the appropriate way of saying it. My name's Harold
11 Curran, I'm the North Slope Borough attorney; that's
12 C-u-r-r-a-n. My address is Post Office Box 69, Barrow,
13 Alaska 99723. I believe that Lloyd Avakanak (ph) is going
14 to make some comments after me, but I've been asked to try
15 to set out generally what the Borough position is, and also
16 to discuss some specific issues. The Borough has recom-
17 mended that the sale be delayed for a period of five years.
18 There are many reasons for this recommendation, but one of
19 the major ones is that it will give an opportunity for the
20 Federal Government and State and local governments to
21 obtain more information concerning biological and geophysical
22 information -- which is, as commented on earlier, very
23 sketchy for the Chukchi Sea. And there are some problems,
24 especially when you get beyond the sheer ice zone in the
25 Beaufort Sea. It will give you an opportunity -- or oil



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1 companies -- to demonstrate their technological capabilities
2 to explore and develop the resources if they're discovered
3 in this area, especially in the deeper water. It will also
4 give further time to develop cleanup capabilities. And one
5 other aspect that might be considered is that if there are
6 significant discoveries in the sales which have taken place
7 it could bring the Federal Government significant increases
8 in revenues for a later sale. If you do not delay the sale,
9 then we're recommending that you delete the eastern and
10 western tracts and that you delete tracts that are in deep
11 water. The reason for those recommendations are multiple.
12 When we're saying deep water we mean water that's in or
13 beyond the sheer ice zone. I don't put a depth to it
14 because, as your comments point out, the sheer ice zone
15 varies, depending on the year and the geographical location
16 and the severity of the winter.

17 I now plan to comment on ice movement, which it is my
18 understanding occurs both in the sheer ice zone and the
19 multi-year ice. You pointed out that ice movement in these
20 areas vary anywhere from 1.4 to 4.8 kilometers a day, and
21 even a higher estimate of 2.2 and 7.4, an average of 4.3 and
22 an extreme of 32 kilometers. And you characterize this as
23 pretty minimal ice movement. And that may be the case in
24 terms of a situation where you have a gravel island and
25 the gravel island is going to withstand the geophysical



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1 force of the ice. But it's not the case when you're talking
2 about the ability to clean up spilled oil. Oil cleanup
3 capability has been recently analyzed by the State of Alaska.
4 S.L. Ross, which is an environmental firm out of Canada,
5 has indicated that industry has demonstrated some difficulty
6 to clean up oil in broken ice conditions. However, the
7 premise of their report is that the ice doesn't move, it's
8 land ice areas. Once you get into sheer ice and pack ice,
9 there's movement. And you're talking about movement any-
10 where from 1.4 kilometers up to 32 kilometers a day. That's
11 quite significant. You're not going to be able to stop the
12 movement, you're not going to be able to control the oil,
13 you're not going to be able to contain it, so the major
14 method of cleaning it up, in the S.L. Ross report, in situ
15 burning, isn't going to occur. North Slope oil is wetter
16 and you can't burn it and you can't bunch it and contain
17 it, so you're not going to be able to clean it up, you can't
18 get equipment out to clean it up, you can't get people out
19 to clean it up; there's nothing to thwart it. This in-
20 ability to clean up spilled oil, I think when coupled with
21 some other factors, your admission that even minor impact
22 on the bowhead whales will have a major impact on subsis-
23 tence for the Inupiat on the North Slope, and the serious-
24 ness of the fact that the bowhead passes by Point Barrow
25 every year, twice a year, and that the ice extremes in the



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1 Point Barrow area are greater probably than any that have
2 been encountered by industry, seems to be pointing toward a
3 major disaster to the bowhead whale and the Inupiat; a
4 disaster that is alluded to in your Draft Environmental
5 Impact Statement but is not really directly addressed.

6 Legally this raises many questions. As you well know,
7 you have to show that you're consistent with the Alaska
8 Coastal Management Program. And that program, as I believe
9 you point out in the Impact Statement, requires and guaran-
10 tees the subsistence. Since you've already indicated that
11 the impact on subsistence in the Barrow area could be major if
12 there is even a minor impact on the bowhead, this one, if
13 coupled with the inability to clean up and contain spilled
14 oil, and the report that Mr. Albert has distributed on the
15 impact spilled oil will have on the bowhead, and the fact
16 that the bowhead migrants pass this point almost in concen-
17 tration twice a year, I think let's you know the signi-
18 ficance of attempts to lease tracts for oil and gas develop-
19 ment in this area. I've talked about cleanup and now I'll
20 talk about platform capability in this area, for example,
21 gravel islands. Well, I'm familiar that gravel islands
22 exist out in the Beaufort now, they exist essentially in
23 land-fast areas; although you mention sheer zone they're
24 not in very deep water. And seeing as how the sheer zone
25 tends to move, I think they're really much closer to the



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1 land-fast areas where you're not going to have significant
2 ice movement. When you get out in deeper waters and you have
3 ice movement, there's a question about the capability of
4 platforms, substantially. Gravel islands -- supposedly
5 that technology's viable in 60 meters of water or shallow water
6 areas. The EIS doesn't state 60 meters but it does talk
7 about other technologies in deeper water, and I'm assuming
8 that's why it mentions deeper water. These technologies
9 have not been demonstrated; geophysical hazards are extreme;
10 there's no indication that there's going to be any efforts
11 to have industry demonstrate that capability before you
12 actually have it out in the water drilling. There was an
13 interesting report in reference to that on the radio
14 tonight. The Department of Labor for the State of Alaska
15 has just released some records which indicate that the
16 instance of injury to oil and gas employees has gone up at
17 the rate of 17% from 1980 to 1981. Their stated reason for
18 that is the oil and gas industry was expanding in the State
19 of Alaska significantly during that time period. And the
20 stated result of that is you have a lot of new employees
21 and a hell of a lot of on-the-job training, which is the
22 method of training that industry uses. As a result of that,
23 you have employees making more mistakes which result in
24 industrial accidents which injure them, taking them off the
25 job and putting them in the hospital. Well, when they're



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1 making mistakes that can also result in oil spills and
2 potential severe and uncontrolled blowouts. I think it's
3 quite commonly referred to that problems that arise do not
4 arise due to failure of equipment, they arise because of
5 failure of operators. And we have a situation here where
6 it's recognized that due to the expansion in the area there
7 are mistakes made by operators in increasing frequency in
8 the state of Alaska. And it certainly will have an impact
9 on the potential for oil spill in the Beaufort Sea. Again,
10 you have to couple that with the inability to clean up.

11 In the -- our information, based on the whales we have
12 taken samples of in the Kaktovik area, shows that the bow-
13 head whale feeds in the eastern part -- in the Beaufort
14 between Kaktovik and the Canadian Beaufort. This fact, we
15 believe, means that this particular area should be con-
16 sidered to be a critical habitat. And an oil spill, of
17 course, in that area can have significant impacts on that
18 habitat.

19 To try to summarize what I've indicated to you, if
20 you don't delay, delete the eastern and western tracts. That
21 will have eliminated the major effects on subsistence for
22 Kaktovik area residents and the residents in Barrow, and
23 will also eliminate the potential impacts to the bowhead
24 whale. When you are considering your decision, I under-
25 stand you have to take these factors into consideration,



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1 the technological capability to explore and balance that
2 against the environmental capabilities -- or the capabili-
3 ties to prevent negative environmental impacts, coupled with
4 the capability to clean up oil, the question mark in refer-
5 ence to platform capability, and major impacts that a dis-
6 aster will have on the bowhead whale and on the Inupiat, I
7 think you can only come to one reasonable decision, and that
8 is that you delete the eastern and western tracts and
9 delete the deep water tracts. Thank you.

10 MR. BROCK: Thank you, sir. Ben Nungasak (sic).

11 STATEMENT OF BEN NUMNIK, AN INDIVIDUAL, BARROW, ALASKA

12 MR. NUMNIK: My name is Ben Numnik, I live in Barrow
13 all my life, 70 years now. Well, ahead of me people have
14 testified and I think they are all talking about what I'm
15 going to say. But watch -- I'm going to say, watch out the
16 current; which way they are moving push the ice. They are
17 very strong, I know that. Whatever -- the deeper area out
18 in the ocean, it's got to be the devil. The currents, which
19 way they are moving is very strong. One time that channel,
20 that island, that ice go underneath and lift it up way up
21 high. Like people say, one time I see that on the ocean,
22 on top of the ice. Well, I don't have much to say. Watch
23 out that current, which way it's moving. In that deeper
24 water out in the ocean it's pretty strong. That's all I'm
25 saying. That's what I have to say, that people are



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1 testifying, that's all I'm saying. Thank you.

2 MR. BROCK: Thank you, sir.

3 STATEMENT OF JOANN LONCAR

4 NORTH SLOPE BOROUGH

5 MS. LONCAR: My name is Joann Loncar, L-o-n-c-a-r, and
6 I work for North Slope Borough Environmental Protection
7 Office. I think I'm in the same boat as Ben, most of the
8 people have covered my comments. However, there are a few
9 problems with the DEIS I would just like to go through page
10 by page. Back in 1979 the seasonal drilling restriction was
11 implemented, not only for oil spill cleanup capability but
12 for noise and disturbance also associated with that noise.
13 And this DEIS treats it very lightly, it gives opportunistic
14 observations of people working on a platform or something
15 seeing whales swimming. There were a couple of different
16 sightings like that mentioned in here, and I think that they
17 should not be mentioned unless there is backup, scientific
18 backup, for it. If we could take them out of the DEIS
19 (indiscernible). Then we go on to oil spill cleanup capa-
20 bility. A couple of people have mentioned a State demon-
21 stration already. I'd like to have MMS have guidelines
22 prepared already that would let us know what the oil
23 companies will be required to do to demonstrate their clean-
24 up capability in broken ice to lessen seasonal drilling
25 restrictions. The risk analysis used in the DEIS is very



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1 confusing to me, I don't understand it. It should be broken
2 down to simpler terms or something like that.

3 MR. BROCK: What was that again?

4 MS. LONCAR: The risk analysis, it's confusing. I mean
5 it at one point talks about Alaska OCS's historical record,
6 and at another point about all OCS spills, and it's very
7 confusing. When you get into the transportation of oil once
8 the field is developed, to my knowledge there are no pipe-
9 lines in this type of situation. I was wondering if MMS
10 was going to require a test line be put in and monitored for,
11 say five years, before any oil is pushed through it? And
12 the same thing goes for new platforms to be put in these
13 previously unexplored areas, would they be monitored before
14 drilling is allowed to occur? I think that would be a good
15 mitigating measure to be put into the final EIS before the
16 long-term programs are implemented.

17 You talk about the drills the industry will have to
18 perform and it says, should operations continue into new
19 seasonal environment, then demonstrations will have to take
20 place. But you don't allow for any buffer period to train
21 -- if you enter broken ice, if you drill up to the point
22 where the ice starts breaking without having to demonstrate
23 the capability -- I think that they should have to demon-
24 strate some reasonable cleanup capabilities. For instance,
25 your guidelines right now state that you have to clean up



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1 1,000 barrels a day. Beyond saying that 48 hours -- or 6
2 to 12 hours have backup equipment there. That would be the
3 same for broken ice? It's not stated and it has to be.
4 At one point you even say, where total removal of the pol-
5 lutant from the environment is not possible -- then it goes
6 on to say more. I know that's not your criteria for clean-
7 up, so it should not be said. The demonstrations haven't
8 proved that total cleanup is possible. I'd also be inter-
9 ested in knowing that MMS plans to adopt the Canadian regu-
10 lations regarding the blowout prevention system. And I
11 think it was Sam Taalak brought up the Polar Sea voyages.
12 They should be included in the EIS. Breaks were made in
13 very young ice, they made it up this far and that's as far
14 as they made it. It was embarrassing. It should be men-
15 tioned. You go on to talk about mass movement and say the
16 hazards associated with mass movements are greatest in the
17 Camden Bay area and the deeper portions of the lease sale
18 area, and I think that kind of backs up Harold's statement
19 that they should be deleted. Mass movement hazards are
20 greater there and those areas should be deleted.

21 There's some problems with some figures in here too,
22 I'm not certain if they incorporate the seasonal drilling
23 restriction or if (indiscernible), IV-65, no, 67, and
24 there's two figures after 67, Figure IV-7 and IV-8; IV-8,
25 during the NPRA lease sale, a document came out called



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1 The Proceedings of NPRA Caribou and Waterbird Impact
2 Analysis Workshop, May 11 through 13, 1981, Anchorage,
3 Alaska, and in that document they depicted areas that were
4 critical to life stages of waterfowl. Many of them. Many
5 of them you have listed here in this figure but you don't
6 have the Cape Halkett area or the Colville River Delta.
7 There's also Kalikpik -- I can't pronounce it, but Salt
8 Marsh -- K-a-l-i-k-p-i-k, and then the Kugrua River salt
9 marsh that are molting or breeding areas for waterbirds.
10 These should be included.

11 And then on page IV-94, it says, major whale migration
12 and feeding areas, that's figure IV-12. I think this is
13 only depicting the spring migration. And the Youngblood
14 and Reeves study that is mentioned in here -- apparently
15 they observed bowheads feeding just outside of Prudhoe ay,
16 outside the Barrier Islands. You know, this is just
17 another data gap we're confronted with. Until all these
18 feeding areas are delineated we put bowhead at risk. Then
19 you just flip it over again to the next page, that's figure
20 IV-13. Does this table incorporate the seasonal drilling,
21 the proposed seasonal drilling restriction? And if it
22 does, isn't 50% chance of bowheads encountering oil spill
23 far too much.

24 MR. EMERSON: It doesn't include (indiscernible), that's
25 something we couldn't count on.



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1 MS. LONCAR: And it also doesn't -- you don't count
2 on any cleanup taking place if this oil spill isn't incor-
3 porated into it?

4 MR. EMERSON: No.

5 MS. LONCAR: Well, this just leads me to believe that
6 a longer buffer period is needed because -- especially here
7 in this whale migration corridor. The majority of all
8 whales, all bowhead whales, migrating through the Canadian
9 Beaufort pass that area. And it's not going to be one or
10 two whales, it's going to be the entire herd.

11 I think that's about all I have. I would like to
12 reiterate the fact that we would like to see both the
13 eastern and western deletions -- or I would like to see both
14 of them deleted. And as we get into new technologies, off-
15 shore pipelines, subsea pipelines, platforms, or drilling
16 ships in this area, I think that monitoring programs should
17 be set up to make sure this thing is not going to fail after
18 oil starts flowing through a pipeline or drilling occurs.
19 Thank you.

20 MR. BROCK: Thank you very much.

21 MR. SMITH: Just one question is all I have. You
22 mentioned Canadian regulations on blowout prevention sys-
23 tems, and I was.....

24 MS. LONCAR: That's on page IV-25.

25 MR. SMITH: Okay, if there's something that's not in



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1 the EIS that you think should be incorporated, and if you're
2 going to furnish comments, why don't you furnish more
3 specific what's not in our regulations that might be in the
4 Canadian regulations that we should look at.

5 MS. LONCAR: Okay. I'm sure that the Borough will be
6 submitting comments.

7 MR. BROCK: Ray?

8 MR. EMERSON: I have one question, well two questions.
9 I hope you're going to give us a copy of some of those
10 comments. I think we got most of them but.....

11 MS. LONCAR: They'll be incorporated in our statement.

12 MR. EMERSON: Okay, thanks a lot. I guess that's it.

13 MR. BROCK: Thank you very much. Daniel Leavitt.

14 STATEMENT OF DANIEL LEAVITT, INDIVIDUAL, LONG LAKE

15 MR. LEAVITT: My name is Daniel Leavitt. (Statement
16 of Mr. Leavitt in Inupiat and translated as follows by Mr.
17 Nageak.)

18 MR. NAGEAK: He mentions his name is Daniel Leavitt,
19 L-e-a-v-i-t-t, and he has had no formal education but in the
20 ways in the Inupiat people he has learned all of that. He
21 has lived in an area about 220 miles east of here at a
22 place called Kawialik, a place that's known now as Long
23 Lake. He mentions that when the ice is out, when there's
24 ice out there, if you go out about 25 miles you probably
25 will not detect any current in this area, but some winters



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1 he has been out maybe 10 miles out into the ocean and he
2 has seen ice that has piled up and he has measured to see
3 how thick the ice is in that area where supposedly there's
4 no current, but he mentions that they are eight feet thick,
5 the ice is. He knows this because the area where they do
6 some seal netting they have to put holes in this ice so
7 that they can put their nets down under the ice. And he
8 has mentioned that to be eight feet. And he always thinks,
9 how is that ice able to be piled up where supposedly there's
10 no current 10 miles out in that area. And learning from
11 experience, you know, after he has been able to pick out
12 the problems in the area in which he lives, it comes to
13 mind that the area where the current is moves the ice that
14 is in an area where there's no current. If the ice is
15 moving even 25 miles away, the pile-up would happen in that
16 area where supposedly there's no current. So just the
17 pressure from an area 25 miles away could pile up the ice
18 that far away. To summarize again what he has just said,
19 he knows that when he has been growing up that the animals
20 have been the mainstay of their lifestyle, and his father
21 has taught him what he knows by experience. And his father
22 has also found some seals that the ice -- when the ice is
23 moving they have got caught in between because the current
24 moves the ice that way. And he knows that just the ice
25 movement itself killed the animals around them. And what



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1 he's fearing is if the rigs, the oil rigs, are going to be
2 put out there and they are in a strong place, or a place
3 where supposedly the ice will not affect that place, he
4 knows the current and the ice and he fears that the oil rig
5 will probably be displaced if the ice starts moving. And
6 because of the way that he has lived, using the animals,
7 moving from one place to the other following the animals,
8 he has in mind that if for some reason the boats that we
9 get up here and the planes that come up here weren't able
10 to come to us because of maybe war, there are still some
11 people who will have to go back to that lifestyle, to be
12 hunting the animals. He says that there's nowhere else to
13 go but back to the ways that his father and he himself has
14 lived up here. He says that he's not going against the
15 English ways but if things come to worse, you know, he is
16 just going to have to go back to that lifestyle. In his
17 mind, you know, that is the reason why he is against the
18 development in this area, because of the animals that we
19 are dependent on. And from experience when the Navy first
20 came around here, there was a tanker that was grounded and
21 because they wanted to get that tanker out they had to spill
22 some of the oil out so it would be lighter for them to pull
23 it out. And just from the spillage from that tanker on the
24 shore, birds and ducks and seals were killed, just from that
25 leakage. In this case I guess it was intentional spilling



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1 of that oil from the tanker. He knows that these things
2 will happen. If there is development, oil spill is going
3 to have to happen. And even though we need the economy,
4 the money economy that we know now, we should have the
5 assurance that if there's going to be oil development, then
6 the rigs, or whatever is put up out there, is going to have
7 to withstand the pressure and conditions that are around
8 here. He mentions that maybe just the noise itself doesn't
9 necessarily do havoc to the whales especially, but the oil
10 spreading on the ocean would probably have an effect on the
11 beluga, the whales and the seals, because they will have to
12 come up for migrating. If it's going to be that the oil
13 development is going to go, the way that the Inupiat people
14 have lived -- there's going to have to be some assurance
15 that that lifestyle will be protected and would be con-
16 tinued. Thank you for the time.

17 MR. BROCK: Thank you, sir. Any questions? The last
18 one we have registered is Mr. John Frederick George.

19 STATEMENT OF JOHN FREDERICK GEORGE

20 ENVIRONMENTAL PROTECTION OFFICE, NORTH SLOPE BOROUGH

21 MR. GEORGE: My name is John Frederick George, I work
22 for the Environmental Protection Office, Box 69, Barrow.
23 In general, I think from reviewing the biological infor-
24 mation in this, it's apparent that the technical know-how
25 to develop this field is not present, nor is it well enough



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1 understood to know exactly what will happen should it be
2 developed. I have a number of specific problems with the
3 draft. To begin with, this has the same method of address-
4 ing problems of specific species that others have, and that
5 is delegating a minor, moderate, or major impact to the
6 animal. The reason I object to this is it -- well, in par-
7 ticular let's say fisheries, a minor effect may not affect
8 the species as a whole over the entire range, but locally
9 it can be significant. And when you're dealing with gill
10 net fisheries up and down the Beaufort and Chukchi coast,
11 as will occur here, the local impact would be major. And
12 it most likely will be should oil get into these major
13 estuary systems. The same is true with birds, it does men-
14 tion that the impact will be major under certain circum-
15 stances but I don't think there's enough emphasis given on
16 the local impact to the communities should oil be -- an oil
17 spill occurrence in a specific area. Now, the section on
18 bowheads, I agree with Dr. Albert, is probably poorly
19 researched and in general you didn't look at enough liter-
20 ature to give a clear view of what would happen to an animal
21 if it encounters oil. And I agree with him that people with
22 proper training should be involved in the review process.

23 I was going to show some slides also to illustrate
24 some of these things we've been talking about. I know a lot
25 of folks that write these things aren't out in the



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1 environment itself and these may help to identify a lot of
2 the things the people have been talking about. (Slide)
3 This, for instance was just five miles north of Point
4 Barrow this past spring. This is a large piece of multi-
5 year ice. And people who are trained in ice physics think
6 that this is probably a piece of glacier ice because it's
7 so continuous. This particular perch was 50-feet high
8 and obviously, you know, tremendous forces were generated,
9 plus this is a very solid homogeneous piece of ice which
10 would exert unusual pressures on structures that are out
11 there. (Slide) This is another feature caused by shearing
12 and it's rather impressive. The shearing forces, the
13 lateral ice movement that occurs offshore here -- and this
14 is out in the same general area only the year previous.
15 We tracked ice, using our tracking equipment, going five
16 kilometers an hour right by structures such as this. It's
17 rather impressive. (Slide) This is a similar thing.

18 I think in general I agree with a lot of local people,
19 this is a unique environment that requires a lot more study
20 before development should even be considered. Finally, I
21 would like to relate an incident that happened in Kaktovik
22 this fall. Typically, as mentioned in this document, the
23 seasonal drilling restrictions and the period the seismic
24 operations can occur are determined by Minerals Management
25 planes. And such surveys are fine for delineating certain



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1 parameters, you know, whale movements and distribution, but
2 in this specific case they can't be everywhere at once and
3 they did not notice the shore movement of whales swim by
4 Kaktovik and there were seismic boats operating at the same
5 time whales were in the immediate vicinity. And these were
6 reported and at that time the seismic work was shutdown except
7 for an area east of Barter Island. Now, in the same area
8 whaling boats sighted 23 whales as opposed to five whales
9 sighted by aircraft in the same area. So relying strictly
10 on aircraft to determine when migrations begin and end, and
11 the exact distribution of whale, at this point is inadequate.
12 Now, also the marine traffic in that area was
13 impressive. I kept a log, which I promptly lost or misplaced
14 before I came here, of all the marine traffic that
15 went by Barter. And even at this point, just to supply
16 Prudhoe and the seismic work that's done in that area,
17 there were several vessels a day going by. And operating
18 seismic boats were heard. And should this field be opened
19 up, I believe that would go up significantly. We've asked
20 that there be a delay of sale. And furthermore, if that
21 does not occur, that there be areas deleted in the eastern
22 and western Beaufort. And just to emphasize that point, I
23 brought in a jar of stomach contents that I collected from
24 a bowhead just this fall from Herman Oshana's (ph) whale, and
25 people who are invertebrate biologists have said that the



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1 whale food, these invertebrate organisms that they feed on,
2 are particularly high in oil at the time the bowhead are
3 feeding in the Barter Island area. If you look at this you
4 can see the band of oil that has risen. This is mainly
5 formula mixed with the contents, but you can see that this
6 clear band of oil has risen to the top. So the point I'm
7 making is that this small area -- they feed in the MacKenzie
8 Delta, but this small area by Barter Island, by virtue
9 of it being late in the feeding season and their last large
10 delta food before they migrate -- they do feed in other little
11 areas as they go, but apparently this is the last really
12 important feeding stop -- and it may be particularly signi-
13 ficant because of the high percentage of oil content of the
14 animals at that time. So this area by Barter should be con-
15 sidered a particularly sensitive feeding area, even more
16 than perhaps in the MacKenzie Delta. I guess that's
17 basically it.

18 I was going to mention one other thing. In your
19 analysis of noise and the effect of noise and marine traffic
20 on bowheads, I've never seen it mentioned but I think it's
21 important to realize that this is still a hunted animal,
22 and that animals that are hunted, as you all know, are more
23 shy and can be more easily frightened, particularly by
24 marine boats, as they can't tell whether it's a hunting crew
25 or just barge traffic. So I think for that reason they may



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1 be particular sensitive to marine traffic.

2 MR. BROCK: John has a question.

3 MR. MORRISON: The oil, I was curious, is this oil from
4 the food organisms that's important to the whale's nutrition,
5 or is this oil that's been ingested somehow that may be
6 harmful?

7 MR. GEORGE: No, no, this is oil that's from the food
8 organisms. In this big digestive mass in the stomach, it
9 has a really viscous oily feel to it, and when you put it
10 in a container and add formula to it it settles out. But as
11 Lloyd Lowry of the Alaska Fish and Game Department has
12 pointed out, late in the fall these invertebrates have a
13 great percentage of lipids in them because they're dependent
14 on photosynthetic organisms that are absent all winter. So
15 they depend, you know, on storing fats to make it through
16 the winter. So this is actually his work, he said that this
17 last feeding is probably the most important to bowheads,
18 particularly because they don't do any significant feeding
19 for perhaps six months.

20 MR. EMERSON: I have one question. In your sightings
21 of the whales, was that near shore?

22 MR. GEORGE: Yes. I'm sorry, these were all sightings
23 from whaleboats in the near shore environment. Generally
24 the MMS planes were going way far offshore this fall because
25 ice conditions were such that whales were migrating about



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1 70 miles offshore. And they were not aware of the shore
2 pulse, which is what the Kaktovik whalers need in order to
3 catch a whale, they can't go way off. Well, there are
4 problems with using aerial surveys for this purpose.

5 MR. EMERSON: Well, in this pulse then there are leads
6 near shore that were not.....

7 MR. GEORGE: There were what?

8 MR. EMERSON: The whales were in leads near shore while
9 the aircraft were looking 70 miles offshore?

10 MR. GEORGE: Yeah. Well, they were running transects
11 to determine distribution and they had not yet seen whales
12 in this Barter Island area. Had they seen them they would
13 have notified the proper people to shut down the seismic
14 operations. But Nolan Solomon was responsible for the
15 actual sightings that shut down seismic operations this fall.
16 And I mean, to verify the sightings, a day or two later --
17 they took a whale a day or two later in exactly the same
18 area, so, you know, they're good, reliable sightings.

19 MR. BROCK: Any questions? Thank you, sir. Anyone
20 else registered, Laura? That is the end of the registered
21 testifiers. Do we have anybody who would like to testify
22 who is not registered? Sir!

23 STATEMENT OF NOLAN SOLOMON, INDIVIDUAL, KAKTOVIK, ALASKA

24 MR. SOLOMAN: My name is Nolan Solomon and I'm from
25 Kaktovik. I've got a written comment but I'm just going to



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1 send it later on to the panel. I want to say here that I
2 came a long way and I have been sitting here for hours
3 listening to people talking about my hunting ground, the
4 Kaktovik area. And I want to tell something about the seis-
5 mic crew that went out this summer. There was just a little
6 bit of it but it really bothers us over there. We don't see
7 no whales, the seismic boat travels day and night. And
8 this is some of the stuff that's just started. When the
9 oil starts, if they have exploration anywhere in that area,
10 we don't know what will happen to the whale. Now, on that
11 lease area, you said a portion of that would be deleted, just
12 from Camden Bay on to Demarcation Point. All of our food
13 comes from the Camden Bay area. The migration of ducks and
14 fish come from that area and what would happen if there's
15 an oil spill of some sort, from that area to our area it
16 would wipe out everything. I want to say a little bit more
17 but I will add this in my written statement. And I want
18 to thank you for giving me just a little time.

19 I've got a letter here for the hearing panel from our
20 mayor, from Archie Brower.

21 (Letter from Mayor Archie Brower received by panel.)

22 MR. BROCK: Thank you, sir. This gentleman right
23 there.

24 STATEMENT OF ROSSMAN PETOOK, INDIVIDUAL, WAINWRIGHT, AK

25 MR. PETOOK: My name is Rossman Petook.



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1 MR. BROCK: Would you spell that, please, sir?

2 MR. PETOOK: Rossman, R-o-s-s-m-a-n, P-e-t-o-o-k. I
3 was born and raised at Boronik (ph), Wainwright. An AWC
4 Commissioner for North Slope Borough Fish and Game. I feel
5 comfortable with my own language so I'll let Roy (sic)
6 translate. (Statement of Mr. Petook in Inupiat and trans-
7 lated by Mr. Nageak as follows)

8 MR. NAGEAK: First, my name is James. The animals
9 that he's talking about -- you know, we've been hearing
10 about the animals of the sea, the whales, the walruses, and
11 the seals, fish, with also the ducks being part of that,
12 but he stated that also significant are animals that are
13 from inland. For example, the caribou. The caribou will
14 be affected by the exploration of the ocean if there's an
15 oil spill because the caribou gets its salt from the ocean.
16 He is going to tell what he has seen. The Elysium (ph) was
17 on the sandspit grounded, and when the ice came to move,
18 because it was frozen solid on that sandspit the Elysium was
19 cut in half long-ways. If the ice that is land-locked can
20 have the effect of cutting the Elysium in half, his question
21 is, the ice that is moving out there in the deeper part of
22 the ocean, how much strength does that have as opposed to
23 the ice that moves that is land-locked. Okay, we also know
24 that if an oil rig is functioning and underway out there on
25 the ocean and if there's an oil spill, then we are in the



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1 process of killing the animals that live in the area. We
2 don't like the feel of oil on our skins ourselves so we
3 have to take care of the animals that are living in the
4 ocean, that way we take care of ourselves. Thank you.

5 MR. BROCK: Thank you, sir. I think the gentleman in
6 the back.

7 STATEMENT OF RON ALIKLIK

8 ENVIRONMENTAL PROTECTION OFFICE, NORTH SLOPE BOROUGH

9 MR. ALIKLIK: My name is Ron Aliklik, I'm with the
10 North Slope Borough Environmental Protection Office, Box 69,
11 Barrow. I wanted to mention a couple of things in this
12 Draft Environmental Impact Statement that I thought should
13 have more in there. One of these was on IV-123 where you
14 say "...the fish overwintering areas in and near the major
15 river deltas would be the most sensitive to petroleum-
16 related impacts." And it lists the Canning, Meade, and the
17 Colville Rivers, and there were some other rivers I thought
18 should be included in there, such as the Chipp, the Oliktok,
19 and possibly the Kugrua around Wainwright. And also, in
20 your impacts on subsistence, Nuiqsut wasn't mentioned at
21 all on your impacts on subsistence study. Nuiqsut should
22 be included also. You went to great lengths on theories on
23 coastal regions but there was nothing listed on Nuiqsut and
24 I feel that Nuiqsut should be included also. And that's
25 about all I have to say. Thank you.



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1 MR. BROCK: Thank you. Mayor? Sam, do you have any-
2 thing else? Do you wish to speak?

3 STATEMENT OF SAM TAALAK, MAYOR, NUIQSUT, ALASKA

4 MR. TAALAK: Alternative No. 3 -- I want to let you
5 know you have never visited our Alaska yet. We have Eskimos
6 living in the Beaufort Sea from island to island with no
7 separation area. You white men have never have seen this
8 yet, we have 5,000 years knowledge (indiscernible) and
9 10,000 miles of nothing. Now, how can I put the concept to
10 your world of this steady movement of this western Beaufort
11 Sea area, one of the most dangerous areas in the world.
12 You have to take care of yourself, that's all you can do,
13 that's how we survive. I'll tell you how we survive,
14 because we know. But I would advise the State of Alaska
15 to let Alternative II -- Alternative II means no sale;
16 Alternative III is delay until you can make sure you can
17 control the work. And you haven't got that kind of tech-
18 nology, because human error is 99%. Okay, there's an oil
19 glut in the world. I'm paying \$2.75 a gallon for gasoline;
20 I'm paying \$2.79 just to heat my house; \$700.00 a month.
21 I'm not complaining; no, I'm not complaining. The basic
22 fact is, until you can find a clear answer to how you can
23 control the Arctic Ocean and Beaufort Sea, God, how can we
24 look at -- how can we solve this problem? The most brilli-
25 ant knowledge in the United States of America can't even



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1 compete with what Russia has. To charge me 2.75 a gallon,
2 I live 20 miles from an oil field. I live 20 miles from
3 an oil field -- you want me to protect you? I am paying
4 (indiscernible). You're too (indiscernible) to tell me
5 what the hell you're going to do with my Arctic Ocean and
6 my whales. I'm not going to go with the specialists because
7 they've already told me. Have you ever seen Dr. Albert's
8 -- Dr. Tom Albert's baleen, what one small drop of oil would
9 do? Do you want to destroy Eskimo nature more than you
10 did. That's all. You've already destroyed the (indis-
11 cernible); you've already destroyed all of the other --
12 you must be some famous (indiscernible).....

13 MR. BROCK: I think this gentleman here had his hand
14 up a little while ago, and then you're next, ma'am. I'm
15 trying to keep track of who's next.

16 STATEMENT OF LLOYD AHVAKANA, ACTING MAYOR, BARROW

17 MR. AHVAKANA: My name is Lloyd Ahvakana, and I'm.....

18 MR. BROCK: Would you spell that?

19 MR. AHVAKANA: A-h-v-a-k-a-n-a, and I'm Acting Mayor
20 now since the Mayor's not here, I just want to make a few
21 comments. These reports that my staff has given earlier,
22 you know, will be in writing and they will be submitted
23 prior to the 10th of November. And looking at this Environ-
24 mental Statement that you have, you know, you have a couple
25 of areas where the industry has indicated that they learned



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1 | how to place these gravel islands, they can control the
2 | ice where they want it to be, and they can let it stack by
3 | itself the way they want it. But you looked at the slides
4 | of how that ice can stack but it wouldn't be in the way that
5 | the oil companies want it to stack. In your Environmental
6 | Statement it's nice, you don't have to worry, that tech-
7 | nology is the greatest thing in the world, how can you deter-
8 | mine where you want that ice stacked. But that's not the
9 | way it is with this current. They're operating where there
10 | is no current right now. And I know that area up there
11 | where they're operating. I think most of the statements
12 | that I had Dr. Albert has given them. He stole my statement,
13 | I think. Anyway, I will yield to my wife back here, the
14 | boss of the family. Thank you.

15 | MR. BROCK: Thank you.

16 | STATEMENT OF LUCY AHVAKANA, INDIVIDUAL, BARROW, ALASKA

17 | MRS. AHVAKANA: My name is Lucy Ahvakana and I wasn't
18 | going to talk but was just to meet my husband tonight, I
19 | was at another meeting. So I listened to everybody talk and
20 | I feel like speaking too. We've got a lot of white people
21 | here speaking for us. I think us Eskimos should speak
22 | because we know all about this nature here. I'm saying like
23 | this gentleman here who talk ahead of us, Daniel Leavitt.
24 | I grew up in Prudhoe Bay 26 years, I live there since 1920,
25 | 20 miles away from the supply camp, Beechy Point and Milne



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1 Point, that's where I was brought up. And like he said,
2 we didn't have chance to go to school. I never been to
3 school, the same as Leavitt, that gentleman, bald-headed.
4 And everybody who never live out in the country talk about
5 it tonight so I decided to talk. I left from up there,
6 there was nothing up there. And I stay in Barrow, I got
7 married to my husband. I lived there 26 years before I
8 moved to civilization, I grew up with migration like animals
9 and survived Eskimo life the same as our ancestors. Also,
10 after I left awhile I got a job in Prudhoe Bay. There was
11 nothing up there when I left, at that time there was nothing,
12 nobody lived there except Eskimos lived from Barrow on up
13 to the Canadian Border; just like farmers a long time ago
14 in the United States, they call them frontiers, they live
15 like -- some of them have never been to school, I ran into
16 a lot of them never been to school when I went to the States.
17 Same as me, some can't read or write very well. So some of
18 those oil companies, when they first came up, and they were
19 telling these white people -- others later came -- those
20 graves up there were whalers. But they were lying, they
21 tried to cover up our ancestors' tracks. Ever since I
22 remember, five years old I guess, everybody lived from here
23 on up to the Canadian Border. Each village -- there was
24 a settlement in Lonely, there were a few families lived
25 there, and at (indiscernible) there were a few families



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1 there. And also in those little camps, each one of those
2 has two or three families living up there ever since I
3 remember. And they were living off our land and they had
4 a few trading posts up there. We called them good white
5 men. They were helping Eskimos to understand Eskimos. And
6 they become like one of us. And since oil companies came,
7 as soon as they landed I got a job in 1974 in an oil com-
8 pany camp, Sohio hires me. I watched that thing grow up
9 there. When I was living up there there was nothing. So,
10 a lot of things changes. I talk to all these environmental
11 guys. I know -- there was a guy worked for Sohio, several
12 environmental people working -- I talked to them. There
13 was one certain guy was really being nice and I always ask
14 him, how it's going to affect ice. He said that if any-
15 thing happened, there's no guarantee. This guy is a
16 Christian guy, he can't tell me lies, he talk honest, I
17 believe him. He said, if ever anything happen out there
18 they can't avoid in that ice thick like that. He said, if
19 it happens in the summertime they can help that, they can
20 burn it or use other things to avoid that. He said no way,
21 there's no guarantee. A lot of time they ask me, what you
22 think of your land up here, these oil companies came like
23 that galavanting around like that out there, you know, on
24 your land. Well, as long as -- since I'm an American
25 citizen and I got nothing whatsoever to say because they



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1 must know what they're doing because if they need anything
2 in the land it's okay, they can avoid in the land, you know,
3 and they have equipment to do that in the tundra. So, also
4 my husband and I were working at part-time job working for
5 environmental people two summers on small contract. And we
6 had a lot of experience cleaning up the mess they made.
7 And one day we tipped out -- how many barrels of oil -- 200
8 and some barrels, some of them jet fuel, some of them stove
9 oil, some of them oil, about 30-some odd drums was just
10 dumped in that lake a few miles from (indiscernible). And
11 when I talked with environmental people, those jet fuel
12 never evaporate when it freeze on the ground. Gasoline,
13 yes, that evaporates. And we also tipped out some of these
14 seismic mess and powder and all that stuff, you know, a real
15 mess, until they got more crews cleaning up. I think up
16 to date they've been careful. I understand that. But if
17 they ever -- if something happen out there -- just like the
18 one in Mexico, somewhere out there, no way they can avoid
19 that hurting our food. Just like that other guy said, if
20 there's a war coming we know everybody -- we're going to
21 have a war pretty soon, we lost a lot of men in the war out
22 there, we know that it's going to get here. No way you can
23 move Eskimos from the villages to the Fairbanks and Anchorage,
24 they cannot survive. They won't be happy. I lived there
25 16 years, I was glad to come back to Barrow. I missed my



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1 home all that time, my food and my culture. That's what
2 happens when those white women and the white men get
3 married, they get divorced because environment and culture
4 cause it. Even Indian and Eskimo same way, when they get
5 married they can't leave their culture instinct from their
6 background. Like I say, I was born an Eskimo, I can't make
7 myself a white person, I always be Eskimo. I like my food.
8 If the war ever breaks -- a long time ago, 1941, when Pearl
9 Harbor got bombed, we used to get ships up north, they
10 closed that channel down and they quit coming, we don't have
11 no more airplane up there and everybody started moving down
12 here where the airplanes are. And how are we going to sur-
13 vive if they close those airlines and those ships from
14 coming through? How do you people expect us to survive in
15 this land after eveything be destroyed? We have to look
16 ahead. You people always study culture and everything.
17 And we study too in our livelihood. And I don't think
18 there's no way we can survive if something ever happen out
19 there. I asked somebody here tonight when they were coming
20 to this meeting, I haven't been to meetings, not too many.
21 I used to all the time but I'm very busy at home and tonight
22 I wasn't going to listen but somehow I was out to meet my
23 husband so I listen to everybody and I decide to talk.
24 Because I'm an Eskimo I have to back my people, my younger
25 generation. We are few of us left now, most of the old



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1 people have gone; we have to lead our young people, we have
2 to back them up. And tonight I want to say, no way, no way,
3 no way you can avoid that strong currents out there. And
4 I was going to ask around, after they decide to drill our
5 gas, why they ask you for opinion. They already make
6 decision they want to drill our gas. What are you going to
7 do, what promise are they going to give if we give comment?
8 I like to know that. It's already in the headlines and you
9 guys explain you're going to sell our hunting grounds.
10 What right we got after you decide? And even if we speak,
11 if we give comments, what answer, what privilege, what
12 protection you guys going to give us? That's what I like
13 to know.

14 MR. BROCK: Hopefully that's some of the information
15 we're getting here tonight. That decision will be made but
16 not by me. But I appreciate you testifying.

17 MRS. AHVAKANA: Like they ask us not to hunt whale and
18 then oil companies can destroy them. Is that right, if we
19 kill what we need for our villages and the oil companies
20 destroy our whales? That's all I have to say, thank you.

21 MR. BROCK: Thank you very much. This gentleman over
22 here.

23 STATEMENT OF KENNETH TOOVAK, INDIVIDUAL, POINT BARROW

24 MR. TOOVAK: My name is Kenneth Toovak.

25 MR. BROCK: Would you spell your name, sir?



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1 MR. TOOVAK: T-o-o-v-a-k. Box Number 381. I lived
2 here at Point Barrow for 60 years, the rest of my life. We
3 all study and practice and try to learn something day by
4 day. But the winds and the currents are impossible to learn
5 when they're going to happen. That's the thing that we
6 can't tell, no matter how much experience we do have.
7 There's no way that we can monitor or control the winds and
8 currents. Three things that I have seen, and personally,
9 myself; one, when I worked at the Naval Arctic Research
10 Laboratory back in 1958, the pipe was put in, 12-inch
11 diameter, was put in at the end of the point right where the
12 channel was 40 feet water. And the pipe would be put right
13 in the center of the tip of your spit. And the causeway
14 of that spit was about 300 feet wide. The pipe was put in
15 60 feet in for the scientists to use to measure the tide of
16 the ocean; 150 feet out -- another 150 feet out towards the
17 lagoon and the channel is right in front. But last summer
18 -- I mean this fall -- I happened to go out to the Point and
19 I discovered that pipe was in the oceanside, approximately
20 10 to 15 feet in the ocean. In other words, the tip of the
21 spit was moved back in towards the ice. I have seen that
22 with my own eyes. Another thing, back in 1963, I suppose
23 everybody knows, we had a storm here at Barrow. The houses
24 were erected around the front and we had this tremendous
25 wind which we don't expect. The owners don't expect. And



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1 they put their houses on the pilings, but that wind, the
2 storm from the ocean, washed and moved those buildings back
3 in. As a matter of fact, one house was all crumpled up due
4 to that storm. And the third one, the ice break had been
5 offshore right below the camp. I think when the ship
6 builders built the ice breaker the chain that would hold the
7 ship in any kind of winds -- that day the ice was coming in
8 and hardly any wind, but there was tremendous current
9 running north and the ice, that pressure, and that ice
10 breaker was hung, anchored, and finally that chain broke
11 from the ice. The current -- the wind, there was hardly
12 any wind at the time. That's all I have to say that I have
13 seen personally with my two eyes and what I have got in
14 mind. Thank you.

15 MR. BROCK: Thank you, sir.

16 STATEMENT OF MICHAEL JEFFERY, INDIVIDUAL, BARROW, ALSKA

17 MR. JEFFERY: My name is Michael Jeffery, J-e-f-f-e-r-y,
18 Box 808, Barrow, and I'm speaking for myself only, but for
19 identification purposes I've lived in Barrow nearly seven
20 years and since last December I've been the Superior Court
21 Judge in Barrow, and the jurisdiction is basically the
22 entire North Slope Borough.

23 Because of the very heavy workload that I now have it's
24 not possible for me to register for hearings or to read
25 Impact Statements; however, while I have been here I did



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1 look at part of this Impact Statement dealing with social
2 impacts, which is something basically that I deal with
3 every day. And I wanted to comment on that. On page,
4 Roman IV-117, the conclusion of the Impact Statement is that
5 this proposal may have major region-wide impact on Inupiat
6 leadership and cultural integrity. Significant stresses
7 caused by the proposal on the Inupiat people's spirit, on
8 their faith in traditional leadership, and on the organi-
9 zations involved in their subsistence pursuits, may have a
10 major impact on sociocultural systems. And I guess what
11 that boils down to is a statement I would like to support,
12 and that is, a major oil lease sale such as this would have
13 additional major impacts on the life of the people here,
14 from the point of view not only of their food and health
15 but their spirit. And when one talks about these impacts, I
16 suppose that most of what you've been hearing, of course,
17 involves environmental issues and ice. And that's all
18 extremely important to bring forward. But you also have
19 to look at things like court statistics. If you look at
20 the recent Alaska Court System report, the most recent one,
21 you can see that in the Barrow Court it has, not the highest
22 case-load in the State, but the highest increase in the
23 case-loads in the State. Almost across the board, any type
24 of case. There has been a tremendous increase in case-load
25 in the Barrow Court over the last few years. It's extremely



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1 significant, if you look at it and compare it with other
2 courts in rural areas especially. And I can report, and
3 I'm sure many of the people here in the room and also lis-
4 tening who live in Barrow can agree with this statement,
5 that we are pushed at the moment right to the limit of the
6 capability of our community to fairly deal with the case-
7 load of, especially, criminal cases. We have currently
8 summoned jurors daily for the next two and a half weeks for
9 different misdemeanor trials. We have three to five major
10 felony trials every month. This is in marked contrast to
11 the situation in other areas of the state. And I think this
12 is one place, a very concrete way that shows that the oil
13 leasing activity is causing, as it comes out of the Impact
14 Statement -- you people talk about social impacts, you
15 talk about social dislocation, you talk about alcohol use
16 and drug abuse, and what it comes down to is the health and
17 safety of the people. And that's what I see every day in
18 the courthouse. I've seen cases where alcohol is almost
19 always involved, almost always the reason. Wonderful people
20 are involved in the criminal justice system because they
21 were drinking, or their family members were drinking, or
22 they're the victim of someone who was drinking. And when
23 I see something in an Impact Statement that says, well,
24 this proposal that we have a lease sale in 1984 will add
25 major impacts to the impacts that are already going on, I



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1 think it's very serious and I think it's the kind of thing
2 that the people reviewing these proposals should consider
3 very carefully. If we have more of these lease sales which
4 threaten to outstrip the ability of the local people to deal
5 with the kind of social changes that are coming on them, we
6 can expect very serious dislocations in the future. Having
7 lived here for seven years now on the North Slope, I have a
8 very deep respect for the abilities of the local people and
9 the quality of the life that they lead. And I urge the
10 people making decisions about the sale to carefully con-
11 sider these very serious impacts that might occur. And I
12 guess at the level we're at today, I would urge -- I would
13 very much support the assessment in the Impact Statement
14 that says major impacts are likely to occur. And I would
15 hope that more discussion could be given to these kinds of
16 impacts, especially as they involve the criminal justice
17 system. Thank you for the opportunity to testify.

18 MR. BROCK: Thank you, sir. Is there anybody else who
19 would like to testify? Sir?

20 STATEMENT OF SVERRE PEDERSON, INDIVIDUAL, COLLEGE, AK

21 MR. PEDERSON: My name is Sverre Pederson, my address
22 is P.O. Box 81332, College, Alaska. And I have been working
23 in the field of subsistence since about 1970, and I'm fairly
24 familiar with the literature that's been produced to date.
25 And I'm unhappy to report to you that the data base, the



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1 quantitative data base that's being used in this Impact
2 Statement on subsistence is sorely lacking information, as
3 are the Impact Statements preceding this. Therefore, it's
4 my opinion that it's virtually impossible to predict or
5 evaluate continued oil and gas leasing along the coast,
6 and for that matter onshore. So since we do not have good
7 quantitative data, we don't have data based on information
8 to make any statements as to what present harvest levels
9 are in Barrow and Nuiqsut and Kaktovik of marine resources.
10 That seems to be, to me, a very essential component one
11 needs in order to make an assessment. I urge you to con-
12 sider this very seriously and try to address it. And in the
13 meantime, in the absence of the data, I think it's only pru-
14 dent, at the minimum anyway, to delete the eastern and
15 western areas that have been identified. I think it would
16 actually be more suitable to delay the sale altogether until
17 a better data base can be developed on the quantitative
18 aspects of subsistence resource use along the coast, and to
19 also fill in the other data gaps that have been pointed out
20 here tonight. Thank you very much.

21 MR. BROCK: Thank you, sir. Anybody -- sir?

22 STATEMENT OF WALTER AKBIK, INDIVIDUAL, BARROW, ALASKA

23 MR. AKBIK: My name is Walter Akbik.

24 MR. BROCK: Would you spell that, sir?

25 MR. AKBIK: A-k-b-i-k. I am going to be translated by



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1 James. (Statement by Mr. Akbik in Inupiat and translated
2 by Mr. Nageak as follows)

3 MR. NAGEAK: He says he's always happy when the oil
4 employees come to listen and to talk. He participates when
5 the oil companies are working and he also has worked with
6 them. It's an exhilarating experience when you find oil
7 on land. As an employee of GSI at (indiscernible), he and
8 another person were able to just go 100 feet down and dis-
9 cover oil. The person that he was drilling with was sur-
10 prised and was even blushing that they could find gas and
11 oil at such a level and it looked like gas that is 72
12 octane. The effect of the drilling when they went through,
13 when they took the drill out, the effect of the oil gushing
14 out sprayed them very much. He has been a part of the
15 exploratory crew with GSI and also the western crew culmina-
16 ting in finding the Prudhoe Bay oilfield. His question --
17 or his comment would be that, why don't the oil people in
18 the oil development conclude in the land area first and then
19 it would be possible to go offshore. He is afraid that the
20 effect of the offshore development would affect the animals
21 that we live on. He knows because he has worked with the
22 GSI people. He knows that there are areas of land that they
23 have marked where there's some oil possibilities. Having
24 worked with the GSI people for two years as a guide he knows
25 where the designated areas for oil drilling are but now they



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1 haven't gone to those areas to drill for oil. After lis-
2 tening to the people talking here this evening he knows that
3 they are people that are talking -- their comments are the
4 truth. They have talked the truth. He's concerned about
5 the oil development and oil leasing on the offshore. He
6 likes to lead the animals and the whales and the muktuk and
7 all the other animals of the sea. He knows that the state-
8 ments being made that state development will affect the
9 animals which we live off, he knows that those statements
10 are true. If they are going to put an oil rig on the ocean
11 down there, he knows that it's going to take time for them
12 to put one down. And he knows that the oil rig isn't just
13 going to be just put there, it's going to take time to put
14 it together. It's not going to be the same experience as
15 putting an oil rig in an area where there's ice (indis-
16 cernible), there's going to have to be some other form of
17 employment to set up an oil rig where the ice and the
18 current are present. He said he feels he doesn't want to
19 talk long but he just wanted to let you know his concerns.

20 MR. BROCK: Thank you, sir. Sir?

21 STATEMENT OF EMMETT MORREY, INDIVIDUAL, ANAKTUVUK PASS

22 MR. MORREY: My name is Emmett Morrey.

23 MR. BROCK: Would you spell that, please, sir?

24 MR. MORREY: Emmett Morrey, M-o-r-r-e-y.

25 MR. BROCK: Address?



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1 MR. MORREY: Anaktuvuk Pass.

2 MR. BROCK: From where?

3 MR. MORREY: Emmett Morrey from Anaktuvuk Pass.

4 MR. BROCK: Anaktuvuk Pass, thank you.

5 MR. MORREY: (Statement in Inupiat and translated by
6 Mr. Nageak as follows)

7 MR. NAGEAK: He says that he doesn't know much about
8 the sea animals but he wants to say something about -- he
9 wants to say something because he has worked with the Naval
10 Arctic Research Laboratory taking care of the animals, the
11 seals. Having worked at NARL taking care of two seals, the
12 people who were responsible for the seals decided that they
13 would put fresh water and sprinkle the fresh water with the
14 table salt and that's how they wanted those seals to live.
15 But he said he told them, why don't you go out and get the
16 water out of the ocean which they have come from, but they
17 didn't listen so they made them live in this fresh water
18 with salt and after awhile the seals got sick, their eyes
19 were infected, and they finally died. In his thinking, and
20 being a thinking person, if the animals of the sea are going
21 to survive -- I guess their environment has to be affected,
22 but if the environment in which the sea animals live is
23 affected by other development, the food system that they
24 have -- it would really have an effect on the animals of the
25 sea. The people that have come up here to listen to the



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1 comments of the people, I'm sure that they have not heard
2 just once but many times about the effect on the animals
3 by what's going to happen here. Even though you have heard
4 the stories, the testimony from other people, the same
5 things, you just keep on coming. He knows that you have
6 heard that we care and don't want anything to happen to our
7 animals. And even though he's an inland Inupiat from
8 Anaktuvuk Pass, he feels that, you know, it affects them.
9 Because when he was a young man and his father netted fish
10 under the ice, maybe one-foot ice, and he has seen the fish
11 that are under the ice, he could see them through the ice
12 and his father would take a piece of willow and hit the ice
13 and as soon as that ice is hit the fish under the ice just
14 roll belly-up. And he knows that the equipment that is
15 going to be used here for exploration in the ocean makes
16 noise.

17 Thank you.

18 MR. BROCK: Thank you. Do we have anybody else who
19 would like to testify? Let's see if anybody else wants to
20 go first, Tom.

21 MR. NAGEAK: I would like to say something.

22 STATEMENT OF JAMES NAGEAK, INDIVIDUAL, BARROW, ALASKA

23 MR. NAGEAK: I would like to say that what you have
24 heard is something from within, and I would like to reiterate
25 their comment about how come there was such activity through



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1 the barges this summer? You know, you are listening for
2 comments and already the oil companies are putting together
3 a vast amount of equipment up here. The comment that I
4 heard was that this summer was the biggest barge activity
5 by the oil companies, even bigger than when Prudhoe Bay was
6 coming. And so, what effect is that kind of activity going
7 to have on a decision that the Department of Interior makes?
8 You know, we say all the reasons, we tell you it's going to
9 affect our lifestyle, it's going to do all of these things,
10 but darn it, you know, the oil companies are getting ready
11 already, even while you guys are listening to us. Whose
12 voice are you going to listen to, the oil companies that
13 provide -- you know, they are going to say to you, okay,
14 we have all of this equipment up there already and here you
15 are saying to us, delay five years, or no sale at all. You
16 know! What good is it? That's my concern. Are you going
17 to listen to 8,000 Inupiat as opposed to billions of dollars
18 that the oil companies are spending to put equipment up
19 here already, even before June of '84? They are getting
20 ready for that. That's all I have.

21 MR. BROCK: Thank you.

22 MR. NAGEAK: Put that into your minds when you are
23 making decisions on this, the Department of Interior is not
24 going to be sidetracked by the comments that they are going
25 to hear, we have all this equipment up here, gee, you are



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1 expecting us to take it back down to Seattle?

2 MR. BROCK: Tom!

3 STATEMENT OF THOMAS ALBERT, NORTH SLOPE BOROUGH, BARROW

4 DR. ALBERT: My name's Tom Albert and I was speaking
5 a little bit earlier but I have a few other things that may-
6 be would seem appropriate. I know it's getting a little
7 late but I don't think that's any excuse for us to stop con-
8 sidering some of these matters. But I think it's fair to
9 say that most people in this room, their eyes are beginning
10 to bother them a little bit. And I want to talk a little
11 bit about bowhead whale eyes, I want to bring it home a
12 little bit by reminding us what maybe is happening to our-
13 selves, our eyes may be getting a little heavy and may be
14 even burning a little bit because of the smoke in here,
15 which is a very mild irritant. If you or I, or one of our
16 children for instance, were going to be immersed in a tank
17 of water that had crude oil spilled on top of it, especially
18 recently spilled crude oil, what would probably be one of
19 the last things you'd tell that person before they had to
20 dive in there? Be sure you keep your eyes shut. Now, we've
21 all had the experience of getting an irritant under the eye-
22 lid, such as an eyelash, a piece of sand, dust, whatever.
23 And even though it's very small it calls itself to our
24 attention very quickly. The eye of the bowhead, as it may
25 be affected by oil contact, gets one brief mention on the



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1 top of page Roman number IV-93 and is immediately dismissed.
2 But one of the reasons for worrying about this is that
3 before you or anyone were to maybe pass off oil effects on
4 bowhead whale eyes as maybe being inconsequential, what do
5 you think it would be on your eye if someone were to say,
6 lean back, pull your eyes apart, I just want to put one drop
7 of crude oil in there, you know, don't worry about it, okay?
8 Why they would have to strap you down to get it done. My
9 guess is that the same thing will happen to these animals.
10 One study was done involving ring seals that we're all well
11 aware of in which a very minor amount of oil contact coupled
12 with a couple of days in oil-free water resulted in what
13 appeared to be good healing of these animals. The reason
14 for making sort of a deal out of this is that the bowhead
15 whale, just as it has this unfortunate little channel in the
16 stomach, and these unfortunate lesions populated by bacteria
17 on the skin, has another problem, and that's associated
18 with its eye. The conjunctival sac of the eye of the bowhead
19 whale is very large. And maybe a lot of folks aren't well
20 acquainted with the limits of the conjunctival sac, but we
21 can all see this in ourselves by standing in front of a
22 mirror, pulling down your lower eyelid and seeing that pink
23 membrane, which is the conjunctival. And you can see the
24 limit of it, it goes under the eyelid and in us, and in most
25 animals, is very small, so if you get something under the



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1 eyelid it's not going to go very far. The bowhead, unfor-
2 tunately, and for reasons unknown to me, that's for sure,
3 has a very extensive conjunctival sac. So if you were to,
4 for instance, put your finger in a fit of rage, or something
5 like this, under your eyelid and try to push it towards the
6 back you could only go about a half-inch or three-quarters
7 of an inch, it would not go around the rear of the eye.
8 But if you were to try to do this to a bowhead whale, if it
9 would accommodate you in this manner, the conjunctival sac
10 goes about two-thirds of the way around the animal's eye,
11 for reasons not known to me. But the fact is, that if an
12 irritant gets under the eyelid of this animal it can
13 rummage around, so to speak, over a very large surface of
14 this animal's eye. And I don't think it's realistic to
15 think that it's going to jump out by magic. I think that
16 any irritant, if it's under this animal's eyelid, is going
17 to be hard to dislodge and may very well wreak havoc on this
18 poor animal's eye. So there are several anatomical charac-
19 teristics of this animal, I think, that lend it to really
20 severe problems. Before I get onto seismic effects, I just
21 want to go over this just one more time about contact, oil
22 contact. I think the eye, the structure of the eye, the
23 structure of the conjunctival sac, will lend itself to
24 damage. The skin with these lesions on which are populated
25 by bacteria, I think oil will stick to these things, which



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1 in itself may be bad, but with the presence of bacteria it
2 may be disastrous. Baleen -- this report is taken up with
3 the fouling of baleen as an end in itself. I don't think
4 that's the problem. I think that's bad enough, but the
5 real problem is what's going to happen when the animal
6 ingests the oil. And I had some people tell me that the
7 animal probably won't even swallow it. But I would ask you,
8 what would you do if you had some oily or sticky or whatever
9 stuck to the inside of your teeth or the roof of your mouth
10 such as peanut butter? You'd dislodge it with your tongue,
11 that's how we all do it. And there's no reason to suspect
12 that this animal won't manipulate its tongue to get at
13 whatever this stuff is that's bothering its baleen and the
14 roof of its mouth. We would have enough sense, maybe, to
15 spit this out. A lot of animals don't. It's very common
16 in animals for them to get rid of things in the mouth that
17 they don't like by swallowing it. I think these animals
18 are going to swallow a lot of oil. Whatever's on their
19 baleen I think they're going to swallow. And then we have
20 this problem with the hair ball, which I hope you feel is
21 maybe not unrealistic. The effects of oil, ingested oil,
22 on an animal are given very short shrift in this document.
23 The one very clear study on the lethality of ingested oil
24 was done by some folks from Canada on polar bears. And that
25 is treated a little bit in here but not in the bowhead



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1 section. But anyway, to get on to something else that's of
2 real interest to people sometime, or at least me anyway, is
3 this issue of seismic boat disturbance. And it's treated in
4 here on pages Roman number IV-88 and 89 for a total of maybe
5 one page, or something along that order. And it goes
6 through the effects of some of these studies that have been
7 done and devotes a paragraph or so to the work Randy
8 Reeves and Don Ljungblad and one other person did last fall
9 when they observed the behavior of bowhead whales in relation
10 to seismic boats. Now, that study, when it was in the pro-
11 posal stage, we had our North Slope Borough Science Advisory
12 Committee review it and it was found to be severely defi-
13 cient. Be that as it may, okay the study was done, the
14 results have now come out and are in this report. For any
15 of you who may really be interested in the effects of geo-
16 physical noise on bowhead whale, rather than dwelling on
17 that one little paragraph, I urge you to read the study.
18 If you work for the Minerals Management Service, the Borough
19 did send comments to Al Powers, about eight pages of com-
20 ments. This report is now out and it should be quoted in
21 here because I'm sure it was in draft stage fully available.
22 The meat of it, so to speak, is reported to some extent
23 because they presented the data at the bowhead biology con-
24 ference. Well anyway, on page 88 it mentions or refers to
25 it as, "Whales seen as little as nine kilometers from active



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1 geophysical operations were not observed vacating the area
2 or displaying avoidance behavior." Then it goes on to say
3 some other results did suggest short-term changes, but it
4 makes no mention. In this report, if you look at it, at the
5 conclusion of results section, which is very interesting,
6 the authors do what I think they should do. And that is,
7 point out what they view to be their most important finding.
8 And they point out, "Our most significant finding is that
9 the behavior of bowhead whales in the presence of seismic
10 sounds -- in this one instance measuring time spent on the
11 surface -- is different than in the absence of seismic
12 sound. Maybe they got all their data together from last
13 fall and looked at it and this one thing turned out to be
14 significantly different, time spent at the surface. They
15 regard this as their most significant finding. Then for
16 three pages they enter into a discussion of their results,
17 a three-page discussion of the results. Not once, not one
18 single mention -- not one single mention is made of this
19 significant result. And one might wonder why. Do you know
20 what the distance was when they observed -- the day they
21 got the best data was September 24th. When they got some
22 very good data absent seismic sound they were flying around
23 some whales watching them; there were no seismic sounds
24 present because they had a sound buoy in the water and they
25 were counting respirations, one thing and another, and then



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1 all of a sudden the seismic boats started up, they got
2 another series of observations on these animals, but their
3 behavior now changed. And in doing statistical evaluation
4 it was statistically different, and they report that. Do
5 you know what the distance from the geophysical boat to the
6 whales was, it was 96 miles. They go to the trouble in this
7 EIS of pointing out that there was no avoidance noted at
8 nine kilometers but somehow forget to point out that a
9 significant behavioral change was noted at 96 miles. Is
10 that being even-handed or not? I don't think it is. I
11 think whoever prepared this section needs to go back and
12 look at the data. And if you're going to put in, you know,
13 one thing where there's no effect noted at nine kilometers,
14 or something like that, and leave out the investigator's
15 most significant finding at 96 kilometers -- 96 miles --
16 anyway, to sum it up, the entire effects thing, this noise
17 thing and the oil spill effects on this animal, the bowhead,
18 in my view, really just doesn't do justice to the data that
19 are available. And if you folks really have a significant
20 input into making decisions on this stuff, I'll urge you to
21 maybe remember a few of these things. No matter how big
22 that animal is, if it's 50 feet long and weighs 55 tons,
23 everything it eats, baleen hairs, oil globs, it doesn't
24 matter what it is, it's got to through a one and a half-inch
25 diameter tube about 12 inches long, which is commonly known



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1 as the third chamber of the stomach. But that's all right,
2 because the nature of this animal, it only eats things that
3 are half-inch to an inch and a half long, very little small
4 shrimp-like critters. So I would just urge you, if you have
5 significant control over the final rendition of this docu-
6 ment that's going to be coming out, have these sections
7 revised and brought up to maybe a little bit more realism.

8 MR. TAALAK: Dr. Albert!

9 DR. ALBERT: Thank you.

10 MR. BROCK: Thank you, sir.

11 MR. TAALAK: Dr. Albert, before you leave may I ask a
12 question?

13 MR. BROCK: Why don't we close the hearing and then
14 you can go ahead and ask the question, sir?

15 MR. TAALAK: This is very important, Mr. Brock.

16 MR. BROCK: The purpose of the hearing is not to ask
17 questions of the witnesses, so if after we close the hearing
18 you wish.....

19 MR. TAALAK: It is the consistent with the villages --
20 it is consistent with the hearing tonight.....

21 MRS. AHVAKANA: Out of order, you guys.

22 MR. TAALAK: Well, Dr. Albert!

23 DR. ALBERT: Well, I guess we've got to do whatever....

24 MR. BROCK: Afterwards we'll be glad to go informal
25 and we'll be glad to discuss this, but for the purpose of



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1 the hearing I think we have to -- we promised everybody that
2 they would not be questioned.....

3 MR. TAALAK: I want it.

4 MR. BROCK: So, let's close the hearing record. We'll
5 go off the record and we'll be glad to discuss anything in-
6 formally, if Dr. Albert wants to answer questions. We
7 can't ask any questions from the floor. Okay, at this
8 point.....

9 DR. ALBERT: Mr. Chairman, I surely don't mind, so if
10 it's your wish.....

11 MR. BROCK: That's the rules for conducting the hearing,
12 sir. So at this point, it's 12:30 and the hearing is
13 closed.

14 (Off record)

15 *****
16 HEARING CLOSED
17 *****

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Alaska Eskimo Whaling Commission

Box 570
Barrow, Alaska 99723

October 24, 1983

AEWC STATEMENT ON DIAPIR FIELD

Industrial clean up efficient has not improve since January 28, 1977 in Buzzards Bay, Massachusettes. Oil spill which is only 20,000 gals. recovered from 81,000 gals. spill; Now this is in Massachusettes not the Arctic. This summer there was suppose to be a demonstration on oil spill response, but the weather did not cooperate in the Arctic, so we will expect the industry to have a oil spill on a calm day. Clean up on oil spill is from Nil to 24% effective clean up in mild climate. Here in the Arctic oil spill will be next to impossible to clean up as proven by the oil industry in their failure to do a demonstration oil spill clean up.

"The loss of a communication channel and the loudness of the ship noises might well result in the dispensation of normally herding marine mammals and may interfere with normal reproduction" p. 275 of "The Question of Sound from Icebreaker Operations": the proceedings of a workshop, Feb. 23 & 24, 1981 Toronto, Ontario. Arctic Pilot Project was stopped because the noise pollution was the most eminent danger along with the oil spill.

We have told the government and the oil industry over and over that the Diapir Field is a critical habitat of the bowhead whale and other marine mammals. If the bowhead is really in a critical

endangered species list than I would be willing to stop hunting the animal if the oil industry will stop their off-shore oil activities.

The United States has no jurisdiction and no claim in the Arctic. (United States of America vs. Mario Saime Escamilla, Congressional Record 97th Congress, 2nd session Dec. 9, 1982 and the law of the sea of the Arctic.) So this lease sale should be at least deleted or delayed and we know federal government will loose billions and billions when the Inupiaqs know that the Diapir Field is larger than North Sea Fields.

As the Commission member of the Alaska Eskimo Whaling Commission I feel this should help your staff in making it clear that this lease is a direct threat to the will being of the Inupiaqs and animals of the Arctic.

Percy Nusunginya, Commissioner
Alaska Eskimo Whaling Commission